U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

SEARCH REQUEST FORM 12-468

Requestor's Name: E. White

Serial Number: 09/145,987

Date: 12/11/98

Phone: 308-4621

Art Unit: 1623

Search Topic:

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevent citations, authors, keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevent claim(s).

STAFF USE ONLY

Date completed: 12-22-98

Searcher: JOHN DANTZMAN

Terminal time: _____

Elapsed time: _____

CPU time: _____

Total time: _____

Number of Searches: _____

Number of Databases: _____

Search Site

_____ STIC

✓ CM-1

_____ Pre-S

Type of Search

_____ N.A. Sequence

_____ A.A. Sequence

✓ Structure

_____ Bibliographic

Vendors

_____ IG

✓ STN

_____ Dialog

_____ APS

_____ Geninfo

_____ SDC

_____ DARC/Questel

_____ Other

Everett White	09/145,987	
December 11, 1998	308-4621	1623 7A17

Please search the cellulose acetate of claims 1-16, the method of producing the cellulose acetate in claim 17, the dope containing the cellulose acetate in claims 18 and 19, and the method for improving releasability of a film from a support in claim 20. A copy of the claims is attached hereto. A copy of the cover sheet comprising the inventor name(s) is also attached.

PROSECUTION TIMELINE – SN 09/145,987

EXR WHITE

Application filed	September 1998	(5 years ago)
Rejected	February 1999	
Response filed	June 1999	
Rejected	October 1999	
Response filed	January 2000	
Telephone interview Examiner White	February 2000	1st interview
Advisory Action	March 2000	
Telephone interview Examiner White	March 2000	2nd interview
Response filed	April 2000	
Advisory Action	May 2000	
CPA filed	May 2000	CPA
Rejected	June 2000	
Response filed	September 2000	
Rejected	December 2000	
Response filed	March 2001	
Telephone interview Examiner White	March 2001	3rd interview
Advisory Action	April 2001	
APPEAL BRIEF FILED	June 2001	Brief
Prosecution reopened Rejected	August 2001	
Personal interview Examiner White Examiner Geist	January 2002	4th interview
Response filed	February 2002	
Rejected	May 2002	
Telephone interview Examiner White	September 2002	5th interview
Response filed	September 2002	
Advisory Action	October 2002	
RCE filed	October 2002	RCE
Notice of Abandonment	December 2002	abandoned?
Petition to withdraw	January 2003	
Decision	March 2003	
Notice of non-responsive Amendment	April 2003	non-responsive Amendment?
Petition to withdraw	April 2003	
Rejected	April 2003	
Current Amendment	August 2003	

```
=> d his

     (FILE 'HOME' ENTERED AT 11:30:12 ON 22 DEC 1998)

     FILE 'HCAPLUS' ENTERED AT 11:30:20 ON 22 DEC 1998
L1          1043 S NAKANISHI Y?/AU
L2          1693 S TANIGUCHI H?/AU
L3          3083 S UEDA K?/AU
L4             0 S L1 AND L2 AND L3
L5          5816 S L1-L4
L6           105 S L5 AND CELLULOS?
L7            22 S L6 AND ACETAT?
L8            20 S L6 AND ACETAT?(3A)CELLULOS?
L9             2 S L8 AND DOPE
                 SELECT RN L9 1-2

     FILE 'REGISTRY' ENTERED AT 11:32:13 ON 22 DEC 1998
L10            1 S E1
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INVENTOR SEARCH

=> d l10

L10 ANSWER 1 OF 1 REGISTRY COPYRIGHT 1998 ACS
RN **9004-39-1** REGISTRY
CN Cellulose, acetate propanoate (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Cellulose, acetate propionate (8CI)
OTHER NAMES:
CN 307E
CN Acetylpropionylcellulose
CN Cabloid CP-M
CN CAP 141
CN CAP 242-0.5
CN CAP 482
CN CAP 482-0.5
CN CAP 482-2.0
CN CAP 482-20
CN CAP 504-02
CN CAP-H 4
CN CAP-MH
CN CAP-S 2
CN Cellulose acetate-propionate mixed ester
CN CP-M
CN E 504
CN PLFS 130
CN Tenite Propionate 361A2R300-10
MF C3 H6 O2 . x C2 H4 O2 . x Unspecified
CI COM
PCT Manual registration, Polyother, Polyother only
LC STN Files: BIOSIS, CA, CAPLUS, CHEMCATS, CHEMLIST, CBNB, CSCHEM, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MSDS-OHS, PIRA, TOXLINE, TOXLIT, USPATFULL
Other Sources: DSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

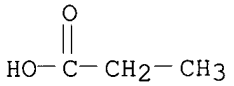
CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

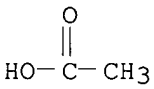
CM 2

CRN 79-09-4
CMF C3 H6 O2



CM 3

CRN 64-19-7
CMF C2 H4 O2



604 REFERENCES IN FILE CA (1967 TO DATE)
29 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
606 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> d all 19

L9 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 1998 ACS
AN 1998:779480 HCAPLUS
TI The **cellulose acetate** and the **dope** which includes that. [MT].
IN Nakano, Yukiko; **Taniguchi, Hiroki**; Matsumoto, Katako
PA Daicel Chemical Industries, Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08B003-06
ICS B29C041-42; C08J005-18; D01F002-28; B29K001-00; B29L007-00
CC 43 (Cellulose, Lignin, Paper, and Other Wood Products)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10316701	A2	19981202	JP 98-66501	19980317
PRAI	JP 97-66657		19970319		

AB Unavailable

=> d all 2

YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:end

=> d all l9 2

L9 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 1998 ACS
AN 1998:112710 HCAPLUS
DN 128:168913
TI **Cellulose acetate** propionate, its **dopes** in organic solvents, and films therefrom
IN Shudo, Yuichiro; **Taniguchi, Hiroki**
PA Daicel Chemical Industries, Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08B003-16
CC 43-3 (Cellulose, Lignin, Paper, and Other Wood Products)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10045803	A2	19980217	JP 96-216671	19960730
	EP 822201	A2	19980204	EP 97-112991	19970729
	EP 822201	A3	19981202		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	CN 1176253	A	19980318	CN 97-118011	19970730
PRAI	JP 96-216671		19960730		

AB The esters with good soly. in org. solvents have amorphous index (Am) .ltoreq.0.4 [Am = [0.5 .times. [I(2.theta. = 5.degree.) + I(2.theta. = 14.5.degree.)]]/.sum.ni=1Pi; I(2.theta. = 5.degree.) and I(2.theta. = 14.5.degree.) = x-ray scattering strength at Bragg angle 2.theta. = 5 and 14.5.degree., resp. in x-ray diffraction of a 100-.mu.m film obtained from the **dopes** and treated at 200.degree. for 60 min; n = peak no. of x-ray scattering strength at 2.theta. = 5-14.5.degree.; Pi = x-ray scattering strength of no. i peak]. The films show excellent mech. strength. Thus, **cellulose** was esterified with AcOH, EtCO2H, Ac2O, and (EtCO)2O at .ltoreq.40.degree. in the presence of H2SO4 to give **cellulose acetate** propionate, which was dissolved in CHCl3, cast on a glass plate, and dried to give a 100-.mu.m film showing Am 0.08, complex elastic modulus 3.23 .times. 109 Pa, storage modulus 3.23 .times. 109 Pa, and tan .delta. 0.031.
ST **cellulose acetate** propionate **dope** film strength
IT 9004-39-1P, **Cellulose acetate** propionate
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(**cellulose acetate** propionate and its **dopes** for films with good strength)

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=> d his

     (FILE 'REGISTRY' ENTERED AT 14:19:09 ON 22 DEC 1998)
               DEL HIS Y

     FILE 'HCAPLUS' ENTERED AT 14:39:34 ON 22 DEC 1998
L1         21644 S (CELLULOSE OR HEMICELLULOSE)(2A)ACETATE
L2            52 S L1(20A)MIXED(2A)ESTER
L3           495 S L1(9A)(FORMIC OR ACRYLIC OR MALONIC OR SUCCINIC)
L4           489 S L1(9A)(FORMATE OR ACRYLATE OR MALONATE OR SUCCINATE)
L5            43 S L1(9A)(GLUTARIC OR FUMARIC OR GLYCOLIC OR LACTIC)
L6            86 S L1(9A)(GLUTARATE OR FUMARATE OR GLYCOLATE OR LACTATE)
L7            45 S L1(9A)(MALIC OR TARTARIC OR CITRIC)
L8            79 S L1(9A)(MALATE OR TARTARATE OR CITRATE)
L9            18 S L1(W)(FORMIC OR ACRYLIC OR MALONIC OR SUCCINIC)
L10          251 S L1(W)(FORMATE OR ACRYLATE OR MALONATE OR SUCCINATE)
L11            1 S L1(W)(GLUTARIC OR FUMARIC OR GLYCOLIC OR LACTIC)
L12           15 S L1(W)(GLUTARATE OR FUMARATE OR GLYCOLATE OR LACTATE)
L13            1 S L1(W)(MALIC OR TARTARIC OR CITRIC)
L14            2 S L1(W)(MALATE OR TARTARATE OR CITRATE)
L15            3 S L1(W)(HALOACETIC OR CHLOROACETIC OR BROMOACETIC OR IODO
L16            0 S L1(W)(HALOPROPIONIC OR CHLOROPROPIONIC OR BROMOPROPIONI
L17          288 SS L9-L16
L18            6 S L17 AND (ALKALI(4A)METAL)
L19           31 S L17 AND (LI OR NA OR K OR RB OR CS )
L20           55 S L17 AND (LITHIUM OR SODIUM OR POTASSIUM OR RUBIDIUM OR
L21           51 S L17 AND (MG OR CA OR SR OR BA)
L22           26 S L17 AND (MAGNESIUM OR CALCIUM OR STRONTIUM OR BARIUM)
L23          114 S L18-L22
L24            0 S L23 AND (PKA OR DISSOC?)

     FILE 'HOME' ENTERED AT 14:51:00 ON 22 DEC 1998

     FILE 'HCAPLUS' ENTERED AT 14:55:04 ON 22 DEC 1998
L25            1 S L17 AND (SR OR BA)
L26           85 S L18 OR L19 OR L20 OR L22 OR L25
L27            0 S L26 AND EQUIVALENT
L28            0 S L26 AND PKA
L29            1 S L17 AND PKA
L30            0 S L17 AND ION(3A)EQUILAV?
L31            1 S L17 AND ION(3A)EQUIVAL?
L32            0 S L17 AND (1 OR 2)(4A)MOLE
L33            0 S L17 AND SLURRY(9A)PH
L34           55 S L17 AND PH
L35           24 S L17 AND PH(5A)(4 OR 5)
L36           22 S L17 AND PH(2A)(4 OR 5)
L37           20 S L17 AND PH(2A)6
L38           32 S L36 OR L37
L39           11 S L38 AND (SLURR? OR MIXTUR?)
L40            0 S L17 AND ACETYLAT?(9A)(DEGREE OR AMOUNT OR PERCENT?)
L41            1 S L17 AND SULFURIC?
L42            0 S L17 AND LINTER AND WOOD
L43            0 S L17 AND HARDWOOD AND SOFTWOOD
L44          135 S L17 AND (ACID OR SULFURIC)
L45          114 S L17 AND  L23
L46           71 S L23 AND (ACID OR SULFURIC)
L47            2 S L46 AND 5.5
L48            0 S L46 AND (DISSOC? OR PKA)
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L49	1	S L23 AND DOPE
L50	1	S L17 AND DOPE
L51	0	S L50 NOT L49

=> d l47 1-2 bib abs

L47 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 1998 ACS
AN 1992:67209 HCAPLUS
DN 116:67209
TI Pharmaceutical composition for the targeted controlled release of an active principle within the intestine, and particularly within the colon
IN Calanchi, Massimo; Zema, Marco; Brunetti, Gabriele; Giorgetti, Enzo
PA Giuliani S.p.A., Italy
SO Eur. Pat. Appl., 7 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 453001	A1	19911023	EP 91-200173	19910129
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	CA 2035155	AA	19911018	CA 91-2035155	19910129
	JP 04224517	A2	19920813	JP 91-27784	19910130
	WO 9116042	A1	19911031	WO 91-EP688	19910409
	W: AU, JP, KR, SU				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
	AU 9176798	A1	19911111	AU 91-76798	19910409
	AU 654277	B2	19941103		
	EP 524989	A1	19930203	EP 91-907396	19910409
	EP 524989	B1	19961016		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	JP 05506217	T2	19930916	JP 91-506876	19910409
	AT 144138	E	19961115	AT 91-907396	19910409
	ES 2093097	T3	19961216	ES 91-907396	19910409
	CA 2040471	AA	19911018	CA 91-2040471	19910415
	ZA 9102792	A	19921230	ZA 91-2792	19910415
PRAI	IT 90-20054	19900417			
	WO 91-EP688	19910409			

AB The title compns. comprise an active agent selected from 5-aminosalicylic **acid**, its derivs., peppermint oil, and corticosteroids, in the form of multiparticles covered with .gtoreq.2 membranes, one of which is sol. at a pH .gtoreq.**5** .**5** and the other being insol. at the same pH but permeable to the intestinal fluids. The preferred polymer for the pH-dependent membrane is Eudragit S. The compns. are effective for the local treatment of chronic intestinal diseases of inflammatory and irritative type. 5-Aminosalicylic **acid** granulated with hydroxypropyl Me cellulose was covered with a first membrane of Eudragit S and a second membrane of Et cellulose. The granules were placed 2 h in 0.1 N HCl soln., 1 h in pH 6.2 buffer, and 5 h in pH 7.2 buffer and drug release amts. were detd.

L47 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 1998 ACS
AN 1990:538501 HCAPLUS
DN 113:138501
TI Pharmaceutical composition of dihydropyridine compound
IN Miyajima, Masaharu; Yamaguchi, Yukiya; Tsunematsu, Takao; Oda, Toshihisa
PA Zeria Pharmaceutical Co., Ltd., Japan; Nissan Chemical Industries,

Ltd.
SO Eur. Pat. Appl., 10 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 344603	A1	19891206	EP 89-109381	19890524
	EP 344603	B1	19911023		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	JP 02049728	A2	19900220	JP 89-50471	19890302
	JP 2528706	B2	19960828		
	AT 68699	E	19911115	AT 89-109381	19890524
	ES 2051920	T3	19940701	ES 89-109381	19890524
	CA 1332152	A1	19940927	CA 89-600631	19890525
	US 4983593	A	19910108	US 89-358144	19890530
PRAI	JP 88-132262	19880530			
	JP 89-50471	19890302			
	EP 89-109381	19890524			

AB **5-(5,5-**Dimethyl-1,3,2-dioxaphosphorinane-2-yl)-1,4-dihydro-2,6-dimethyl-4-(3-nitrophenyl)-3-pyridine carboxylic **acid** 2-[phenyl-(phenylmethyl)amino]ethyl ester P-oxide.HCl.ethanol solvate (1:1) (I) possessing hypotensive activity, is formulated with hydroxypropyl Me **cellulose acetate succinate** (II) to improve the water-soly. I 4 and II 12 g were dissolved into 100 mL of EtOH-CH2Cl2 (1:4) and 30 g lactose was added to the mixt. The whole was dried and pulverized; the powder 23 g was mixed with corn starch 10.7 g and talc 0.3 g and filled into capsules (total 340 **mg**/capsule or 20 **mg** I/capsule). A dissoln. test (according to Japanese Pharmacopeia) of the above capsules resulted in higher dissoln. rate than control capsules using other polymeric compds. instead of II. Also, in vivo studies with beagle dogs showed that the capsules provided an enhanced bioavailability.

=> d l41 bib abs

L41 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 1998 ACS
AN 1995:484659 HCAPLUS
DN 122:222868
TI Sustained release pharmaceutical composition containing antiarrhythmic pyrimidinedione derivatives
IN Hyugaji, Teruo; Inage, Ikuo; Amano, Masaki; Sasaki, Masako; Iizuka, Hajime; Kobayashi, Tadashi
PA Mitsui Toatsu Chemicals, Inc., Japan
SO Eur. Pat. Appl., 18 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 640341	A1	19950301	EP 94-306360	19940830
	R: DE, FR, GB				
	JP 07112932	A2	19950502	JP 94-200835	19940825
PRAI	JP 93-212458		19930827		

AB A sustained-release pharmaceutical compn. for oral administration comprises a core comprising (a) 1,3-dimethyl-6-{2-{N-(2-hydroxyethyl)-N-[3-(4-nitrophenyl) propyl]amino}ethylamino}-2,4-(1H,3H)-pyrimidinedione (I) or its acid adduct as an active component, (b) an org. acid, and (c) a water sol. polymer such as polyvinyl alc., and a coat comprising a mixt. of (d) a water insol. polymer and (e) a water sol. polymer; the components (a) to (c) being permeable together through the coat so that the active component (a) may be stably dissolved in an intestinal liq. and may not ppt. in a short period of time. Granules comprising white sugar particles 300, I 500, lactose 1500, fumaric acid 250, PVP 104 g were coated with a coating compn. contg. Eudragite RS 12.6, and PVP 2.4 g to obtain sustained-release pharmaceutical granules.

=> d l38 1-11 bib abs

L38 ANSWER 1 OF 32 HCAPLUS COPYRIGHT 1998 ACS
AN 1998:576580 HCAPLUS
DN 129:207233
TI Long-acting sodium diclofenac compositions
IN Iwata, Yukiya; Imai, Eiji; Sato, Tomomi
PA Taiyo Pharmaceutical Industry Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10231242	A2	19980902	JP 97-51131	19970220

AB The long-acting compns. contain rapid-release prepns. of Na diclofenac (I) and enteric- and hydrophobic substance-coated sustained-release prepns. of I. Rapid-release granules (A) contg. I 32.8, hydroxypropyl Me cellulose 6.3, D-mannitol 0.9, talc 1.3, and sucrose granules 58.7 wt.% were mixed with sustained-release I granules (B) coated with a mixt. of Aqoat AS-HF (hydroxypropyl Me **cellulose acetate succinate**) 4.5, Ethocel (Et cellulose) 4.5, glycerin fatty acid ester 0.7, talc 0.7, EtOH 71.6, and H2O 18.0 wt.% at A:B wt. ratio of 3:7 and placed in capsules (contg. 37.5 mg I/capsule). The capsules released .apprx.60 and .apprx.90% I within 5 and 10 h, resp. in a phosphate buffer (**pH 6**.2) at 37.degree..

L38 ANSWER 2 OF 32 HCAPLUS COPYRIGHT 1998 ACS
AN 1998:251036 HCAPLUS
DN 128:326482
TI Pharmaceutical dosage form with multiple enteric polymer coatings for colonic delivery
IN Kelm, Gary Robert; Kondo, Koji; Nakajima, Akio
PA Procter & Gamble Company, USA
SO PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9816206	A1	19980423	WO 97-US18564	19971010
W: BR, CA, CN, JP, MX				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				

PRAI US 96-728946 19961011
AB A pharmaceutical compn. in a unit dosage form for peroral administration in a human or lower animal, having a gastrointestinal tract comprising a small intestine and a colon with a lumen therethrough having an inlet to the colon from the small intestine, comprises (a) a safe and effective amt. of a therapeutically active agent incorporated into a compressed, bi-convex tablet, with a max. diam. of about 4-10 mm; (b) a non-pH dependent smoothing coat applied to the tablet surface free from edges or sharp curves; and (c) an enteric polymer coating material comprising at least one

=> d l39 1-11 bib abs

L39 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 1998 ACS
AN 1998:576580 HCAPLUS
DN 129:207233
TI Long-acting sodium diclofenac compositions
IN Iwata, Yukiya; Imai, Eiji; Sato, Tomomi
PA Taiyo Pharmaceutical Industry Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 10231242	A2	19980902	JP 97-51131	19970220

AB The long-acting compns. contain rapid-release prepns. of Na diclofenac (I) and enteric- and hydrophobic substance-coated sustained-release prepns. of I. Rapid-release granules (A) contg. I 32.8, hydroxypropyl Me cellulose 6.3, D-mannitol 0.9, talc 1.3, and sucrose granules 58.7 wt.% were mixed with sustained-release I granules (B) coated with a **mixt.** of Aqoat AS-HF (hydroxypropyl Me **cellulose acetate succinate**) 4.5, Ethocel (Et cellulose) 4.5, glycerin fatty acid ester 0.7, talc 0.7, EtOH 71.6, and H2O 18.0 wt.% at A:B wt. ratio of 3:7 and placed in capsules (contg. 37.5 mg I/capsule). The capsules released .apprx.60 and .apprx.90% I within 5 and 10 h, resp. in a phosphate buffer (**pH 6**.2) at 37.degree..

L39 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 1998 ACS
AN 1997:195672 HCAPLUS
DN 126:190941
TI Pharmaceutical preparation in form of coated capsule releasable at lower part of digestive tract
IN Hatano, Harumi; Ito, Takahiro; Ishibashi, Takashi; Yoshino, Hiroyuki; Mizobe, Masakazu
PA Tanabe Seiyaku Co., Ltd., Japan
SO Eur. Pat. Appl., 26 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 754452	A2	19970122	EP 96-401604	19960718
EP 754452	A3	19980121		
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CA 2181502	AA	19970121	CA 96-2181502	19960718
JP 09087169	A2	19970331	JP 96-187952	19960718
CN 1142944	A	19970219	CN 96-107185	19960722
PRAI JP 95-183655		19950720		

AB A coated capsule which can release the contents at a lower part of the digestive tract comprises (a) a hard capsule contg. an acidic substance, (b) a polymer film sol. at low pH which is formed on a surface of the hard capsule, and (c) an enteric coating film which is formed on a surface of the polymer film sol. at low pH.

According to the pharmaceutical prepn. of the present invention, any kind of a medicament can be delivered to any desired site between the upper part of the small intestine and the lower part of the large intestine in the digestive tract by controlling the amt. of polymer(s) used for the polymer film sol. at low pH and/or by selecting the kind of the polymer film sol. at low pH and/or the acidic substance without any complicated requirements for each medicament. A capsule was filled with a **mixt**. of 10 mg prednisolone and 10 mg succinic acid to obtain a core capsule, which was spray-coated with a 5 % soln. of Eudragit E 100 dissolved in ethanol, in a coating amt. of 30 mg per capsule. The obtained coated capsule was further spray-coated with a coating soln. of hydroxypropyl Me **cellulose acetate succinate** in a **mixt**. of ethanol and water. A dissoln. test was carried out in a pH 1.2 fluid and **pH 6**.8 fluid according to Japanese Pharmacopeia; the medicament was not dissolved at all for a long time in the 1st pH 1.2 fluid and in the **pH 6**.8 fluid, the medicament was quickly dissolved after the lag time of about 4 h.

L39 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 1998 ACS
AN 1997:164622 HCAPLUS
DN 126:162313
TI Enteric coated drug preparations coated by using powdered or pelletized waxes without solvents
IN Maruyama, Naoaki; Kokubo, Hiroyasu
PA Shinetsu Chem Ind Co, Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08333240	A2	19961217	JP 95-159767	19950602

AB The prepns. consist of solid drugs coated with finely powd. enteric-sol. coating agents by dispersion of powd. or pelletized waxes with heating to .gtoreq.m.p. of the waxes. Granules contg. 2 wt.% vitamin B2 (I), hydroxypropyl cellulose, and corn starch were coated with a powd. **mixt**. of AS-MF (hydroxypropyl Me **cellulose acetate succinate**) and talc with addn. of powd. cetyl alc. followed by mixing under heat to give coated granules, which released only 2.0 wt.% of I in an aq. acidic soln. (pH .apprx.1.2) and disintegrated in 8 min in an aq. soln. (**pH** .apprx.**6**.8).

L39 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 1998 ACS
AN 1997:154691 HCAPLUS
DN 126:162312
TI Solvent-free enteric coated drug preparations
IN Maruyama, Naoaki; Kokubo, Hiroyasu
PA Shinetsu Chem Ind Co, Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI JP 08333238 A2 19961217 JP 95-159765 19950602
AB The prepns. consist of solid drugs coated with finely powd. enteric-sol. coating agents with dispersion of liq. waxes. Granules contg. 2 wt.% vitamin B2 (I), hydroxypropyl cellulose, and corn starch were coated with a powd. **mixt.** of AS-MF (hydroxypropyl Me **cellulose acetate succinate**) and talc with addn. of melted lauryl alc. to give coated granules, which released only 1.0 wt.% of I in an aq. acidic soln. (pH .apprx.1.2) and disintegrated in 5 min in an aq. soln. (**pH** .apprx.**6**.8).

L39 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 1998 ACS
AN 1995:879036 HCAPLUS
DN 123:266144
TI Pharmaceutical preparation controlled to release medicinal active ingredient at targeted site in intestinal tract
IN Hirakawa, Yoshiyuki; Uemura, Katsuji; Fukui, Eiji; Hanamori, Tami; Yoshino, Hiroyuki
PA Tanabe Seiyaku Co., Ltd., Japan
SO Eur. Pat. Appl., RCPP
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 671167	A1	19950913	EP 95-101828	19950210
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	JP 07223970	A2	19950822	JP 94-16028	19940210
	CA 2142142	AA	19950811	CA 95-2142142	19950209
	US 5614220	A	19970325	US 95-385982	19950209
	CN 1116926	A	19960221	CN 95-101372	19950210
	CN 1116523	A	19960214	CN 95-102282	19950311
PRAI	JP 94-16028	19940210			
	JP 94-91119	19940311			

AB A pharmaceutical prepn. for oral administration comprises (a) a core contg. an active ingredient, (b) a press-coated layer comprising a pH-independently water-sol. polymer, said layer being provided around the core, and (c) a film comprising an enteric polymer, said film being provided around the press-coated layer. The active ingredient is not released during residence in the stomach and, after forwarded from the stomach, until reaching a targeted site in the intestine, and thereafter is quickly released, so that the active ingredient is efficiently delivered to the targeted site in the intestinal tract. Granules contg. diltiazem HCl, corn starch, and PVP were prepd. and mixed together with Ca citrate, Ca CM-cellulose, and Mg stearate. The **mixt.** was tabletted and press-coated with a **mixt.** of powder of HPC-L and HPC-M and spray-coated with a coating soln. of hydroxypropyl Me **cellulose acetate succinate** and tri-Et citrate in EtOH. A dissoln. test showed that diltiazem HCl was not released at least 12 hs in a pH 1.2 fluid and was quickly released in a **pH 6**.8 fluid after the lag-time of .apprx.3 hs in a pulsatile dissoln. pattern.

L39 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 1998 ACS
AN 1995:462814 HCAPLUS
DN 122:222892

TI Sustained-release cefaclor preparations
IN Kanai, Tatsuo; Shibata, Mitsuho; Ogawa, Kanzan
PA Nihon Iyakuhin Kogyo Co Ltd, Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07010758	A2	19950113	JP 93-150628	19930622

AB The title prepns. comprise fast-dissolving compns. of cefaclor (I) and slow-dissolving compns. of I. The slow-dissolving compns. are prepd. by enteric-coating the fast-dissolving compns. with a coating agent contg. hydroxypropyl Me **cellulose acetate succinate** and tri-Et succinate, to dissolve them at **pH** .apprx.**6**. I 200, corn starch 17.5, D-mannitol 8.75, Ca CMC 15, Macrogol-6000 q.s., and an aq. soln. of hydroxypropyl cellulose 75g were kneaded and granulated to give a fast-dissolving compn. The above compn. (200g) was spray-coated with a soln. contg. Aquat MF 5, Aquat HF 5, tri-Et citrate 3.3, talc 3.3, and H2O 83.4% to give a slow-dissolving compn. The above 2 compns. were mixed at the ratio of 4:6 and the **mixt**. was made into capsules (each contg. 187.5 mg I).

L39 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 1998 ACS
AN 1995:462809 HCAPLUS
DN 122:222890
TI Controlled-release oral preparations containing polymers for delivery to intestine
IN Noda, Kazuo; Hirakawa, Yoshuki; Ishibashi, Takashi; Yamada, Toshasu
PA Tanabe Seiyaku Co, Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07010745	A2	19950113	JP 93-150027	19930622

AB Controlled-release prepns. contain (a) cores of acidic substances, (b) the 1st layer which comprise of water-insol. polymers and may contain water-sol. substances, (c) the 2nd layer contg. a drug, (d) the 3rd layer of polymers sol. at low pH covering the 2nd one, and (e) enteric-sol. polymers covering the 3rd layer. Succinic acid (400 g) was added to 150 g Nonpareil (sucrose) with spraying with a binder (contg. sucrose and EtOH) to give 630 g a granulation product which was coated with 15 g Eudragit RS by spraying to give granules coated with 1st layer. Granules were then coated with a **mixt**. of 45 g theophylline (I) and 155 g mannitol with spraying with a binder (contg. sucrose and EtOH) to give 420 g granules. The granules (150 g) were coated with 60 g Eudragit E (II) by spraying with EtOH-H2O **mixt**. contg. II and then coated with 42 g hydroxypropyl Me **cellulose acetate succinate** (III) by spraying with aq. suspension contg. III and tri-Et citrate to give 250 g granules. Granules did not release I in aq. soln. (pH 1.2) up to 600 min later and released 100% of the drug in aq. soln. (**pH 6**.8) within .apprx.500 min.

L39 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 1998 ACS
AN 1992:201026 HCAPLUS
DN 116:201026
TI Evaluation of microcapsules. XXX. Utility of **mixture** of commercially available polymers as constituents of sustained-release microcapsules containing cefadroxil or theophylline
AU Uchida, Takahiro; Yasutake, Takuji; Goto, Shigeru
CS Fac. Pharm. Sci., Kyushu Univ., Fukuoka, 812, Japan
SO Chem. Pharm. Bull. (1992), 40(2), 463-6
CODEN: CPBTAL; ISSN: 0009-2363
DT Journal
LA English
AB Hydroxypropyl Me **cellulose acetate succinate** high grade (AS-HG) and Et cellulose (EC) **mixt.** microcapsules contg. cefadroxil or theophylline were prepd. by a solvent evapn. method in liq. paraffin dissolved sorbitan tristerate as a dispersing agent, and their sustained-release properties were evaluated. The microcapsules prepd. with AS-HG:EC (in a 2:5 wt. ratio) **mixt.** contg. 20% of a cefadroxil or theophylline exhibited apparent zero-order releasing pattern in **pH 6** to 8, at 50 rpm and 37.degree. (paddle method). These microcapsules were administered orally to beagle dogs and the plasma concns. of cefadroxil or theophylline were measured periodically. As a result of in vivo investigation, a satisfactory sustained-release plasma pattern and an apparent zero-order process in the gastrointestinal absorption were confirmed by deconvolution anal. of both drugs.

L39 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 1998 ACS
AN 1992:136249 HCAPLUS
DN 116:136249
TI Masking taste with polymers in pharmaceutical formulations
IN Mapelli, Luigi Giovanni; Marconi, Marco Giuseppe Raffaele; Zema, Marco
PA Eurand International S.p.A., Italy
SO PCT Int. Appl., 16 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9116043	A1	19911031	WO 91-EP689	19910409
	W: AU, CA, JP, KR, SU, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
	CA 2058946	AA	19911018	CA 91-2058946	19910409
	AU 9176812	A1	19911111	AU 91-76812	19910409
	AU 635133	B2	19930311		
	EP 477333	A1	19920401	EP 91-907609	19910409
	EP 477333	B1	19940112		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	JP 05500674	T2	19930212	JP 91-506877	19910409
	AT 99927	E	19940115	AT 91-907609	19910409
	ES 2048594	T3	19940316	ES 91-907609	19910409
	RU 2085190	C1	19970727	RU 91-5010753	19910409
	ZA 9102793	A	19921230	ZA 91-2793	19910415
	US 5409711	A	19950425	US 91-776329	19911211
PRAI	IT 90-20055		19900417		

IT 90-2005 19900417
EP 91-907609 19910409
WO 91-EP689 19910409

AB The taste of orally administered drugs is masked by coating the drug with a polymeric membrane which is sol. only at a **pH** of **5** or more. An acid substance is included in the formulation contg. the coated drug to reduce or prevent the dissoln. of the membrane in the oral cavity. Roxithromycin and polyethylene glycol were mixed with water, granulated, dried, coated with a **mixt**. of Eudragit L 100-55, NaOH, talc, tri-Et citrate, licorice flavor, and water, and incorporated into tablets.

L39 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 1998 ACS
AN 1991:566649 HCAPLUS
DN 115:166649
TI Sustained-release preparations
IN Sugiyama, Makoto; Ushimaru, Kouichi; Ando, Tomini; Nakamichi, Kouichi; Yasuura, Hiroyuki
PA Nippon Shinyaku Co., Ltd., Japan
SO PCT Int. Appl., 22 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9106291	A1	19910516	WO 90-JP1364	19901024
	W: JP, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				

PRAI JP 89-279292 19891026

AB A sustained-release pharmaceutical is prepd. by coating a pharmaceutical, which is sol. in an acidic medium, with a water-insol. substance, followed by coating with a substance sol. at .gtoreq. **pH 5**. Granules consisting of flavoxate-HCl, lactose, corn starch, microcryst. cellulose, and poly(vinyl alc.) were first coated with a **mixt**. of Eudragit RS30D, tri-Et citrate, and talc, and then with a **mixt**. of hydroxypropyl Me cellulose phthalate, propylene glycol, and talc to give a slow-release formulation.

L39 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 1998 ACS
AN 1986:90611 HCAPLUS
DN 104:90611
TI Aqueous dispersions containing vinyl polymer and cellulose derivative
IN Masuda, Takeshi; Onishi, Kiyoshi; Yoshino, Fumio
PA Dainippon Ink and Chemicals, Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 60195172	A2	19851003	JP 84-50529	19840316

AB Aq. dispersions for lacquer-type coatings are prepd. by dispersing 100 parts polymer obtained by polymn. of a vinyl monomer contg. 1-15% hydrophilic monomer having H- or C1-4 alkyl-terminated polyoxyethylene chain of av. mol. wt. (M) (1.5-15) .times. 103 and

.gtoreq.1 ethylenically unsatd. bonds in a H2O-sol. org. solvent and 5-100 parts nitrocellulose (I), cellulose acetate propionate, cellulose acetate butyrate, and/or **cellulose acetate succinate** in H2O. Thus, a **mixt.** of Et Cellosolve 300, polyethylene glycol (M 6000) Me ether methacrylate 35, Me methacrylate 476, Bu acrylate 210, methacrylic acid 14, I 200, and tert-Bu hydroperoxide 14 parts was stirred 6 h. H2O (973 parts) was dropwise added to the above **mixt.** to give an aq. dispersing soln. (A) with 40.2% solids (av. particle diam. .ltoreq.0.2 .mu.), viscosity 1230 cP, and **pH** 7. **4**. A flexible steel plate was coated to a thickness of 30 .mu. with a compn. of A, TiO2 contg. 40% pigment, and glass pieces. The coating layer had pencil hardness F and excellent gasoline resistance and gloss.

=> d l29 bib abs

L29 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 1998 ACS
AN 1997:590078 HCAPLUS
DN 127:253071
TI Development of cellulose derivatives as novel enteric coating agents soluble at pH 3.5-4.5 and higher
AU Kokubo, Hiroyasu; Obara, Sakae; Minemura, Katsuyoshi; Tanaka, Takashi
CS Specialty Chemicals Research Center, Shin-Etsu Chemical Co., Ltd., Kubiki, 942, Japan
SO Chem. Pharm. Bull. (1997), 45(8), 1350-1353
CODEN: CPBTAL; ISSN: 0009-2363
PB Pharmaceutical Society of Japan
DT Journal
LA English
AB Hydroxypropyl Me cellulose (HPMC) was selected as a base polymer to develop novel enteric coating agents for acid protection which can dissolve at pH around 4, and was modified with trimellitic acid or maleic acid at various degrees of substitution. These carboxylic acids have higher dissocn. consts. and higher soly. in water than the carboxylic acids of existing enteric coating polymers. The synthesized polymers were micronized and dispersed in aq. medium to det. their **pKa** values by potentiometric titrn. The pH of dissoln. and the water vapor permeability of the cast films prepd. from org. solns. were also evaluated. HPMC trimellitate showed good acid resistance, and the pH at which it dissolves can be controlled in the range of pH 3.5 to 4.5 by varying the content of trimellityl groups and the methoxyl substitution of the base polymer.

=> d l49 bib abs

L49 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 1998 ACS
AN 1979:524809 HCAPLUS
DN 91:124809
TI Water-absorbing acrylic fibers
IN Tanaka, Hiroyoshi; Jujii, Shigeru; Suzuki, Mitsuo
PA Toray Industries, Inc., Japan
SO Ger. Offen., 25 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2901778	A1	19790726	DE 79-2901778	19790118
	JP 54101920	A2	19790810	JP 78-4473	19780119
	JP 58018444	B4	19830413		
PRAI	JP 78-4473	19780119			

AB Acrylic fibers having excellent water absorption and mech. properties and consisting of a porous core covered with a denser skin are manufd. from compns. contg. 90/99.9% acrylic polymer and 0.01-10% synthetic polymer miscible with the acrylic polymer. Thus, a spinning **dope** contg. 20% 95.85:4.0:0.15 M acrylonitrile-Me acrylate-**sodium** methallylsulfonate copolymer [26658-88-8] and 3% cellulose acetate (I) [9004-35-7] (based on acrylic polymer wt.) was extruded through a nozzle with 0.065 mm-diam. orifices into a 50% aq. DMSO soln. at 55.degree.. The fibers were stretched 6 times their original length, washed with water, and dried 15 min at 130.degree.. The fibers obtained had water absorption 49%, tenacity 2.3 g/denier, and elongation 18.4%, vs. 7%, 2.9 g/denier, and 22.1% for fibers prepd. without I.

=> d l49 ind

L49 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 1998 ACS
IC D01F006-54; D01F008-08; D01F001-08
CC 39-2 (Textiles)
ST water absorbing acrylic fiber; pore stabilizer acrylic fiber; **cellulose acetate acrylic** fiber manuf
IT Acrylic polymers, preparation
RL: PREP (Preparation)
(manuf. of water-absorbing, contg. pore-stabilizing polymeric additives)
IT Pore
(stabilizing agents, polymeric, in water absorbing acrylic fiber manuf.)
IT 26658-88-8
RL: USES (Uses)
(fiber, water-absorbing, contg. pore-stabilizing polymeric additives)
IT 9003-20-7 9003-39-8 9003-54-7 9004-35-7 9010-96-2 25322-68-3 27637-03-2
RL: USES (Uses)
(pore stabilizers, in water-absorbing acrylic fiber manuf.)

=> d l26 bib abs

L26 ANSWER 1 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1998:742256 HCAPLUS
TI Stable oral pharmaceutical dosage forms
IN Chen, Jivn-ren
PA Sage Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9850019	A1	19981112	WO 98-US9449	19980508

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

PRAI US 97-46089 19970509
US 97-950432 19971015

AB The present invention relates to new stable enteric coated pharmaceutical dosage forms for oral use contg. Omeprazole or Lansoprazole, to a formulation and a method for the manuf. of such a dosage form, and to a method of gastric acid pump inhibition and providing gastrointestinal cytoprotective benefit by using them. Core granulations contg. omeprazole and **calcium** carbonate were prepd., encapsulated or directly compressed into tablets with appropriate excipients.

=> d l26 bib abs 2

L26 ANSWER 2 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1998:576580 HCAPLUS
DN 129:207233
TI Long-acting **sodium** diclofenac compositions
IN Iwata, Yukiya; Imai, Eiji; Sato, Tomomi
PA Taiyo Pharmaceutical Industry Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 10231242	A2	19980902	JP 97-51131	19970220

AB The long-acting compns. contain rapid-release prepns. of **Na** diclofenac (I) and enteric- and hydrophobic substance-coated sustained-release prepns. of I. Rapid-release granules (A) contg. I 32.8, hydroxypropyl Me cellulose 6.3, D-mannitol 0.9, talc 1.3, and sucrose granules 58.7 wt.% were mixed with sustained-release I granules (B) coated with a mixt. of Aqoat AS-HF (hydroxypropyl Me **cellulose acetate succinate**) 4.5, Ethocel (Et cellulose) 4.5, glycerin fatty acid ester 0.7, talc 0.7, EtOH 71.6, and H2O 18.0 wt.% at A:B wt. ratio of 3:7 and placed in capsules (contg. 37.5 mg I/capsule). The capsules released .apprx.60 and .apprx.90% I within 5 and 10 h, resp. in a phosphate buffer (pH 6.2) at 37.degree..

=> d l26 bib abs 3

L26 ANSWER 3 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1998:251036 HCAPLUS
DN 128:326482
TI Pharmaceutical dosage form with multiple enteric polymer coatings for colonic delivery
IN Kelm, Gary Robert; Kondo, Koji; Nakajima, Akio
PA Procter & Gamble Company, USA
SO PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9816206	A1	19980423	WO 97-US18564	19971010
	W: BR, CA, CN, JP, MX				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
PRAI	US 96-728946		19961011		

AB A pharmaceutical compn. in a unit dosage form for peroral administration in a human or lower animal, having a gastrointestinal tract comprising a small intestine and a colon with a lumen therethrough having an inlet to the colon from the small intestine, comprises (a) a safe and effective amt. of a therapeutically active agent incorporated into a compressed, bi-convex tablet, with a max. diam. of about 4-10 mm; (b) a non-pH dependent smoothing coat applied to the tablet surface free from edges or sharp curves; and (c) an enteric polymer coating material comprising at least one inner coating layer and only one outer coating layer; wherein the therapeutically active agent is released at a point near the inlet to, or within the colon; each of the inner coating layer(s) is an enteric polymer that begins to dissolve in an aq. media at a pH about 5-6.3; and the outer coating layer is an enteric polymer that begins to dissolve in an aq. media at a pH about 6.8-7.2.

=> d l26 bib abs 4

L26 ANSWER 4 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1998:181304 HCAPLUS
DN 128:292142
TI Kinetics of immobilized chitinase produced by Pseudomonas aeruginosa **K**-187 in shrimp and crab shell fermentation
AU Wang, San-Lang; Chio, Sau-Hwa
CS Department Food Engineering, Da-Yeh University, Chan-Hwa, 51505, Taiwan
SO Adv. Chitin Sci. (1997), 2, 256-259
CODEN: ACSCFF
PB Jacques Andre
DT Journal
LA English
AB For immobilization, chitinase produced by Pseudomonas aeruginosa **K**-187 in shrimp and crab shell (SCS) fermn. was covalently bound to a pH-dependent hydroxypropyl Me **cellulose acetate succinate** (ASL) polymer. It found that the immobilized chitinase was completely sol. at pH>5.5, while it became insol. at pH<4.5. For this study, the immobilized efficiency as high as 99% was obtained when crude chitinase soln. was used. The optimum pH and temp. increased from 6.0 and 40.degree.C up to 8.0 and 50.degree.C, resp. The half-life for immobilized chitinase activity at 4.degree.C was extended to 13 days. The ASL polymer is a water sol. and insol. materials. It should be a better carrier for chitinase immobilization and activity retention than the water insol. ones.

=> d l26 bib abs 5

L26 ANSWER 5 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1998:112212 HCAPLUS
DN 128:145372
TI Capsules for oral preparations and capsule preparations for oral administration
IN Tanida, Norifumi; Aoki, Jun; Nakanishi, Masaru
PA Hisamitsu Pharmaceutical Co., Inc., Japan; Tanida, Norifumi; Aoki, Jun; Nakanishi, Masaru
SO PCT Int. Appl., 43 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9805310	A1	19980212	WO 97-JP2686	19970801
	W: CN, KR, US				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	JP 10152431	A2	19980609	JP 97-207720	19970801
PRAI	JP 96-205027		19960802		

AB The invention relates to capsules for oral prepns. useful for colon diseases such as colon cancer, ulcerative colon inflammation, constipation and diarrhea, and systemic diseases such as osteoporosis which undergo no changes in the stomach and small intestine but, after getting to the large intestine, disintegrate and quickly liberate the drugs encapsulated therein at the same time. These capsules have the base which is made from hydroxypropylmethylcellulose (HPMC) optionally contg. polyethylene glycol, gelatin or catechin. On the surface of the capsule base in which a powder or liq. contg. physiol. active substance(s) is encapsulated, there is formed a double-coating structure consisting of the inner layer made from a cationic copolymer and the outer layer made from an anionic copolymer.

=> d l26 bib abs 6

L26 ANSWER 6 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1998:53145 HCAPLUS
DN 128:90189
TI Classification of chemically modified celluloses using a near-infrared spectrometer and soft independent modeling of class analogies
AU Svensson, Olof; Josefson, Mats; Langkilde, Frans W.
CS Dep. Anal. Mar. Chem., Goteborg Univ., Goteborg, S-412 96, Swed.
SO Appl. Spectrosc. (1997), 51(12), 1826-1835
CODEN: APSPA4; ISSN: 0003-7028
PB Society for Applied Spectroscopy
DT Journal
LA English
AB A method for classification of 11 chem. modified cellulose (I) samples was developed with the use of near-IR (NIR) spectroscopy and soft independent modeling of class analogies (SIMCA). The sample set consisted of 440 different batches from 11 different I derivs. A full factorial design in temp. and moisture was made for 1 sample from each class in order to introduce climate variations in the calibration sample set. Principal components anal. (PCA) models were made for each class, and samples not present in the calibration set were classified according to the SIMCA method. Only 1 type II error (acceptance of an unacceptable sample) was detected in the classification of the different I samples. The no. of type I errors (rejection of an acceptable sample) ranged from 0 to 14%. Subgroups, from different manufacturers, viscosities, particle sizes, and degrees of substitution, were detected and correctly classified. The sample presentation, focus of the instrument, no. of ref. measurements, depth of penetration,and selection of training set samples are discussed.

=> d l26 bib abs 7

L26 ANSWER 7 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1997:537538 HCAPLUS
DN 127:152943
TI Compositions of ibudilast for sustained release
IN Shibahara, Sadaichi; Sakata, Tasuke; Masuda, Kiyoshi; Yono, Mitsuhiro; Hirooka, Ogino; Shigefuji, Hideko; Takahashi, Tetsuya
PA Taisho Yakuhin Kogyo K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09169645	A2	19970630	JP 95-331644	19951220

AB Sustained-release oral granules of ibudilast are manufd. by using a specific binder (e.g. cellulose ether and methacrylate copolymer), a microfine powder matrix (e.g. silica), and a coating agent (e.g. cellulose ether) for controlled drug release without requiring special equipments. Et cellulose 120 g and hydroxypropyl Me cellulose phthalate 150 g were dissolved in water/ethanol 700 mL to give a viscous soln., to which ibudilast 100 g and silica fine powder 250 g were added. The obtained slurry was dry-granulated and the resulting granules were sprayed with hydroxypropyl Me cellulose phthalate dissolved in water/ethanol. The coated granules were filled up to give a capsule contg. 10 mg ibudilast.

=> d l26 bib abs 8

L26 ANSWER 8 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1997:491768 HCAPLUS
DN 127:113365
TI A multi-layered pharmaceutical films containing water-soluble high molecular weight substances
IN Yamamura, Keiko; Tomiya, Noboru; Sugimoto, Manabu; Usami, Makoto; Sato, Yuji; Nagao, Yoshiyuki
PA Sanwa Kagaku Kenkyusho Co., Ltd., Japan
SO Eur. Pat. Appl., 21 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 781546	A1	19970702	EP 96-120926	19961227
	R: CH, DE, FR, GB, IT, LI				
	JP 09235220	A2	19970909	JP 96-335468	19961216
	JP 2791317	B2	19980827		
PRAI	JP 95-338728		19951226		
	JP 96-335468		19961216		

AB A multi-layered film prepn. has a drug contg. layer which contains a water-sol. high mol. wt. substance as a main base material, has on one surface thereof a layer difficult to dissolve in water, and carries on the other surface an adhesive substance or contains therein the adhesive substance in a dispersed state. The film prepn. is easy in handling thereof and shows good adhesiveness to the mucous membrane in the oral cavity, even if it has been remarkably moisted, and gives no bad feeling in use. Hydroxypropyl cellulose (viscosity = 1000-4000 cps) (I) 503, I (viscosity 15-400 cps) 503, PEG-400 2, and lidocaine hydrochloride 107 mg, were added into 37mL ethanol soln. and stirred to obtain a homogeneous soln., then pullulan 190 mg was added thereto to prep. a suspension. The suspension was poured into a dish and gradually dried to obtain a drug-contg. layer, in which particles of pullulan was uniformly dispersed. A part of soln. of hydroxypropylmethyl cellulose phthalate 86 mg and PEG-400 9 mg in a mixt. of ethanol soln. and methylene chloride (1:1.0 mL) was sprayed on the surface of the drug-contg. layer in the dish. The spraying and drying procedures were repeated to obtain a double-layered film prepn. consisting of the drug-contg. layer, on which particles of the adhesive high mol. substance appear and layer made difficult to dissolve in water.

=> d l26 all 9-20

L26 ANSWER 9 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1997:396671 HCAPLUS
DN 127:39888
TI Enteric-coated sticking-free preparations manufactured by solvent-free coating method
IN Maruyama, Naoaki; Kokubo, Hiroyasu
PA Shin-Etsu Chemical Industry Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM A61K009-52
ICS A61K045-00; A61K047-02; A61K047-12; A61K047-14; A61K047-34; A61K047-38; A61K047-44; B01J002-30
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 09132523	A2	19970520	JP 95-316056	19951109

AB The title prepns. are manufd. by (A) spray coating finely powd. enteric coatings onto solid drugs with spraying liquefied plasticizers or waxes without using solvents or (B) spraying powd. or pelletized waxes onto solid drugs at a temp. higher than the m.p. of the waxes without using solvents, then (C) spray coating 2-10 wt.% sticking-preventing agents onto the enteric-coated drugs without using solvents. Granules were spray coated with powders contg. AS-MF (hydroxypropyl Me **cellulose acetate succinate**) and talc with spraying tri-Et citrate at 80.degree., then overcoated with 5 wt.% talc to give enteric-coated sticking-free granules.
ST enteric coated sticking free solid drug; solvent free enteric coating solid drug; plasticizer wax enteric coating solid drug; granule enteric coating cellulose talc citrate
IT Plasticizers
(enteric-coated sticking-free solid prepns. manufd. by using plasticizers or waxes without using solvents)
IT Waxes
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(enteric-coated sticking-free solid prepns. manufd. by using plasticizers or waxes without using solvents)
IT Drug delivery systems
Granules (drug delivery systems)
(enteric-coated; enteric-coated sticking-free solid prepns. manufd. by using plasticizers or waxes without using solvents)
IT Beeswax
(purified, sticking-preventing agent; enteric-coated sticking-free solid prepns. manufd. by using plasticizers or waxes without using solvents)
IT Carnauba wax
Paraffin waxes, biological studies
Polyoxyalkylenes, biological studies
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES

(Uses)
(sticking-preventing agent; enteric-coated sticking-free solid prepns. manufd. by using plasticizers or waxes without using solvents)

IT 71138-97-1, AS-MF
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(enteric-coated sticking-free solid prepns. manufd. by using plasticizers or waxes without using solvents)

IT 77-93-0, Triethyl citrate
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(plasticizer; enteric-coated sticking-free solid prepns. manufd. by using plasticizers or waxes without using solvents)

IT 557-04-0, **Magnesium** stearate 1592-23-0, **Calcium** stearate 7631-86-9, Carplex, biological studies 9004-64-2, Hydroxypropyl cellulose 9004-65-3, TC-5R 14807-96-6, Talc, biological studies 25322-68-3, Polyethylene glycol 26446-35-5, Glycerin monoacetate
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(sticking-preventing agent; enteric-coated sticking-free solid prepns. manufd. by using plasticizers or waxes without using solvents)

L26 ANSWER 10 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1997:373097 HCAPLUS
DN 126:344610
TI Thermal analysis of cellulose and some etherified and esterified derivatives
AU Kaloustian, J.; Pauli, A. M.; Pastor, J.
CS Lab. Chimie Analytique, Fac. Pharmacie, Marseille, 13385, Fr.
SO J. Therm. Anal. (1997), 48(4), 791-804
CODEN: JTHEA9; ISSN: 0368-4466
PB Akademiai Kiado
DT Journal
LA French
CC 43-3 (Cellulose, Lignin, Paper, and Other Wood Products)
Section cross-reference(s): 36, 37, 63, 80
AB The identification of cellulose and some of its derivs.: cellulose acetate phthalate, hydroxypropyl Me **cellulose acetate succinate, sodium** CM-cellulose, hydroxyethyl cellulose, hydroxypropyl cellulose, hydroxypropyl Me cellulose, Me cellulose, hydroxypropyl Me cellulose phthalate, is possible by thermal anal. (simultaneous DTA-TG). For that reason, one consider the temp. of the DTA max. peaks and the DTG min. peaks. This identification is easy for these products in pharmaceutical specialties.
ST cellulose deriv thermal analysis
IT Thermogravimetric analysis
(differential; thermal anal. of cellulose and some etherified and esterified derivs.)
IT Drug delivery systems
(excipients; thermal anal. of cellulose and some etherified and esterified derivs. in)
IT Differential thermal analysis

(thermal anal. of cellulose and some etherified and esterified derivs.)

IT 9004-32-4, **Sodium** carboxymethyl cellulose 9004-34-6, Cellulose, properties 9004-38-0, Cellulose acetate phthalate 9004-62-0, Hydroxyethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose 9050-31-1, Hydroxypropyl methyl cellulose phthalate 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate**
RL: ANT (Analyte); PRP (Properties); ANST (Analytical study)
(thermal anal. of cellulose and some etherified and esterified derivs.)

L26 ANSWER 11 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1997:244371 HCAPLUS
DN 126:229664
TI Methods for making hardly soluble medicine amorphous
IN Miyamoto, Misao; Oda, Toshihisa
PA Nissan Chemical Industries, Ltd., Japan; Miyamoto, Misao; Oda, Toshihisa
SO PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
IC ICM A61K009-00
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9706781	A1	19970227	WO 96-JP2246	19960808
	W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA				
	CA 2228907	AA	19970227	CA 96-2228907	19960808
	AU 9666693	A1	19970312	AU 96-66693	19960808
	EP 852140	A1	19980708	EP 96-926600	19960808
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	CN 1192677	A	19980909	CN 96-196203	19960808
	NO 9800549	A	19980402	NO 98-549	19980209
PRAI	JP 95-205936	19950811			
	JP 95-310400	19951129			
	JP 95-310401	19951129			
	WO 96-JP2246	19960808			

AB A process for prepg. a solid dispersion of a hardly sol. medicine, comprises heating or mechanochem. treating the hardly sol. medicine, an amorphism-inducing agent, and an amorphism stabilizer. These processes make it possible to make hardly sol. medicines amorphous at a temp. lower than those employed in the conventional methods. The solid dispersions of the amorphous hardly sol. medicines thus obtained have an improved mucosal or rectal absorption rate, which makes it possible to elevate their bioavailability. A blend contg. nifedipine (m.p. 175.degree.) 10, succinic acid (m.p. 192.degree.) 10, and HPMC-AS 20 g was mixed with 5 g water and subjected to wet granulation and heating to 160.degree. for 1 h. Amorphization of

the mixt. of nifedipine/succinic acid started at 158.degree..

ST amorphization insol drug stabilizer heating bioavailability; nifedipine succinate heating amorphization

IT Polyvinyl acetals
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
((diethylamino)acetals, amorphism stabilizer; amorphization of hardly sol. medicine by heating for improved bioabsorption)

IT Acrylic polymers, biological studies
Gelatins, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amorphism stabilizers; amorphization of hardly sol. medicine by heating for improved bioabsorption)

IT Amino acids, biological studies
Phosphatidylcholines, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amorphism-inducing agents; amorphization of hardly sol. medicine by heating for improved bioabsorption)

IT Amorphization
Drug bioavailability
Heating
Microwave heating
Solid dispersions (drug delivery systems)
(amorphization of hardly sol. medicine by heating for improved bioabsorption)

IT 1398-61-4, Chitin 7585-39-9, .beta.-Cyclodextrin 7631-86-9, Silica, biological studies 9000-01-5, Arabic gum 9000-69-5, Pectin 9002-89-5, PVA 9003-20-7, Polyvinyl acetate 9003-39-8, PVP 9004-34-6D, Cellulose, derivs. 9004-54-0, Dextran, biological studies 9004-61-9, Hyaluronic acid 9004-65-3, HPMC 9005-25-8, Starch, biological studies 9005-32-7, Alginic acid 9007-28-7, Chondroitin sulfate 9012-76-4, Chitosan 9057-02-7, Pullulan 9080-79-9, **Sodium** polystyrenesulfonate 9082-07-9, **Sodium** chondroitin sulfate 10016-20-3, .alpha.-Cyclodextrin 17465-86-0, .gamma.-Cyclodextrin 25213-24-5, Vinyl acetate-vinyl alcohol copolymer 25322-68-3D, Polyethylene oxide, derivs. 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amorphism stabilizer; amorphization of hardly sol. medicine by heating for improved bioabsorption)

IT 50-81-7, Ascorbic acid, biological studies 57-11-4D, Stearic acid, esters 57-13-6, Urea, biological studies 60-27-5, Creatinine 62-54-4, **Calcium** acetate 69-65-8, Mannitol 69-72-7, Salicylic acid, biological studies 69-79-4, Maltose 77-92-9, Citric acid, biological studies 87-69-4, Tartaric acid, biological studies 87-89-8, Inositol 98-92-0, Nicotinic acid amide 107-35-7 110-15-6, Succinic acid, biological studies 110-16-7, Maleic acid, biological studies 110-17-8, Fumaric acid, biological studies 110-44-1, Sorbic acid 118-71-8, Maltol 128-44-9, **Sodium** saccharin 302-95-4, Deoxycholic acid **sodium** salt 520-45-6, Dehydroacetic acid 625-52-5, Ethylurea 1405-86-3, Glycyrrhizinic acid 6284-40-8, Meglumin 21645-51-2, Aluminum hydroxide, biological studies 22275-72-5, **Sodium** thiomalate 22839-47-0, Aspartame 25322-68-3, Macrogol
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amorphism-inducing agent; amorphization of hardly sol. medicine by heating for improved bioabsorption)

IT 58-55-9, Theophylline, biological studies 64-77-7, Tolbutamide 21829-25-4, Nifedipine 54527-84-3, Nicardipine hydrochloride

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amorphization of hardly sol. medicine by heating for improved bioabsorption)

L26 ANSWER 12 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1997:234111 HCAPLUS
DN 126:229627
TI Coating materials for solid pharmaceutical dosage forms
IN Muto, Yasuaki; Onda, Yoshiro; Kawashima, Yoshiaki; Maruyama, Naoaki
PA Shinetsu Chem Ind Co, Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C09D007-00
ICS C09D101-00; C09D133-02; C09D133-06
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 09031370	A2	19970204	JP 95-205181	19950719

AB Coating materials for solid pharmaceutical dosage forms comprise water-insol. polymers such as hydroxypropyl Me cellulose and dispersants such as polyvinyl alc. at 88:12 - 98:2 wt. ratio, which are freeze-dried. The materials required no polymn. initiators and were redispersed in water to form a dispersion prior to coating.
ST coating material solid pharmaceutical
IT Polymers, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Water-insol.; coating materials for solid pharmaceutical dosage forms)
IT Polymers, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(co-; coating materials for solid pharmaceutical dosage forms)
IT Coatings
Dispersing agents
Drug delivery systems
(coating materials for solid pharmaceutical dosage forms)
IT Drug delivery systems
(enteric; coating materials for solid pharmaceutical dosage forms)
IT Drug delivery systems
(slow-release; coating materials for solid pharmaceutical dosage forms)
IT 79-10-7D, Acrylic acid, copolymers 79-10-7D, Acrylic acid, derivs., copolymers 79-41-4D, MethAcrylic acid, copolymers 79-41-4D, MethAcrylic acid, derivs., copolymers 151-21-3, **Sodium** lauryl sulfate, biological studies 9002-89-5, Polyvinyl alcohol 9004-32-4 9004-38-0, Cellulose acetate phthalate 9004-57-3, Ethyl Cellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hydroxypropyl methyl cellulose 52907-01-4, Cellulose acetate trimellitate 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(coating materials for solid pharmaceutical dosage forms)

L26 ANSWER 13 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1997:168614 HCAPLUS
DN 126:162299

TI Oral pharmaceutical composition containing antimicrobial actives and sustained release pantoprazole
IN Dietrich, Rango; Sachs, George; Ney, Hartmut; Benedikt, Gerald
PA Byk Gulden Lomberg Chemische Fabrik Gmbh, Germany
SO PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K009-28
ICS A61K009-50
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9702020	A1	19970123	WO 96-EP2892	19960702
	W: AU, BG, BR, BY, CA, CN, CZ, EE, HU, IL, JP, KR, LT, LV, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2232450	AA	19970123	CA 96-2232450	19960702
	AU 9665174	A1	19970205	AU 96-65174	19960702
	EP 841903	A1	19980520	EP 96-924849	19960702
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI				
PRAI	US 95-498386		19950705		
	WO 96-EP2892		19960702		

AB An oral pharmaceutical compn. of pantoprazole in pellet or tablet form wherein the pantoprazole is at least partly in slow-release form, is administered in combination with an antimicrobially-active ingredient for the treatment of disorders caused by Helicobacter. A tablet comprised (1) a core contg. pantoprazole **Na** .cntdot.3/2 H2O 45.1, Na2CO3 10, mannitol 20, HPMC 2910 (3 cps) 25, HPMC 2910 (15 cps) 4, and Ca stearate 2.1 mg, (2) a release-slowing layer contg. Et cellulose 9.85, micronized lactose 2.36, propylene glycol 0.98, and 25 % ammonia 0.8 mg, and (3) an enteric coating contg. Eudragit L 13.64 and tri-Et citrate 1.36 mg.
ST enteric coated tablet pantoprazole antimicrobial Helicobacter
IT Pellets (drug delivery systems)
Tablets (drug delivery systems)
(enteric-coated; oral compns. contg. antimicrobial actives and sustained-release pantoprazole)
IT Antimicrobial agents
Helicobacter
Stomach diseases
(oral compns. contg. antimicrobial actives and sustained-release pantoprazole)
IT 56-75-7, Chloramphenicol 57-62-5 57-92-1, Streptomycin, biological studies 59-87-0, Nitrofurazone 60-54-8, Tetracycline 61-33-6, Penicillin G, biological studies 67-20-9, Nitrofurantoin 67-45-8, Furazolidone 69-53-4, Ampicillin 79-57-2, Oxytetracycline 87-08-1, Penicillin V 114-07-8, Erythromycin 153-61-7, Cephalothin 443-48-1, Metronidazole 564-25-0, Doxycycline 1403-66-3, Gentamicin 1404-04-2, Neomycin 1405-87-4, Bacitracin 1406-11-7, Polymyxin 6506-37-2, Nimorazole 8063-07-8, Kanamycin 9002-89-5, Polyvinyl alcohol 9004-38-0, Cellulose acetate phthalate 9004-57-3, Ethyl cellulose 9050-31-1, Hydroxypropyl methyl cellulose phthalate 10118-90-8, Minocycline 13292-46-1, Rifampicin 14882-18-9, Bismuth subsalicylate 15686-71-2, Cefalexin 18323-44-9, Clindamycin

19387-91-8, Tinidazole 25086-15-1, Methacrylic acidmethyl methacrylate copolymer 26787-78-0, Amoxicillin 28572-98-7, Ethyl methacrylate-Methacrylic acid copolymer 33434-24-1, Eudragit RS 35607-66-0, Cefoxitin 37205-99-5, Carboxymethyl ethyl cellulose 37517-28-5, Amikacin 50370-12-2, Cefadroxil 51481-65-3, Mezlocillin 52907-01-4, Cellulose acetate trimellitate 53994-73-3, Cefaclor 57644-54-9, Bismuth subcitrate 63527-52-6, Cefotaxime 64221-86-9, Imipenem 64544-07-6, Cefuroxime axetil 70458-92-3, Pefloxacin 70458-96-7, Norfloxacin 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate** 76470-66-1, Loracarbef 81103-11-9, Clarithromycin 82419-36-1, Ofloxacin 83905-01-5, Azithromycin 85721-33-1, Ciprofloxacin 87239-81-4, Cefpodoxime proxetil 87726-17-8, Panipenem 96036-03-2, Meropenem 102625-70-7, Pantoprazole 138786-67-1
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oral compns. contg. antimicrobial actives and sustained-release pantoprazole)

L26 ANSWER 14 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1997:145273 HCAPLUS
DN 126:141392
TI Cellulases with reduced mobility by immobilization or gel incorporation for use in laundry detergents or fabric softeners
IN Nielsen, Jack Bech; Tikhomirov, Dmitry Feodorovich
PA Novo Nordisk A/s, Den.; Nielsen, Jack Bech; Tikhomirov, Dmitry Feodorovich
SO PCT Int. Appl., 77 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C12N009-42
ICS C11D003-386; D06M016-00
CC 7-7 (Enzymes)
Section cross-reference(s): 46
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9701629	A1	19970116	WO 96-DK284	19960626
	W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA				
	AU 9662988	A1	19970130	AU 96-62988	19960626
	EP 835302	A1	19980415	EP 96-921912	19960626
	R: BE, DE, DK, ES, FR, GB, GR, IT, NL, SE, PT, IE				
PRAI	DK 95-750	19950628			
	WO 96-DK284	19960626			

AB A cellulolytic enzyme prepn. comprising a cellulase with reduced mobility is prepd., e.g., by increasing the mol. wt. or apparent size of the cellulase protein mol. or by insolubilizing or immobilizing the cellulase. The cellulase component may be immobilized by incorporation into a gel, by the formation of stable or temporary aggregates with enhanced mol. mass, by rapid immobilization of cellulase protein on insol. components, by rapid autoimmobilization of the cellulase protein, or by adsorption to an insol. or sol. carrier. The carrier is preferably a

cellulose-contg. carrier of fibrous, microcryst., or amorphous structure, and more preferably a sol. or insol. polymer, esp. a polysaccharide capable of interaction with the enzyme via a cellulose binding domain (CBD) or catalytic domain, or a sol. polycationic cellulose deriv. For example, Humicola insolens 43-kDa cellulase (1.6 g/L) may be autoimmobilized on 100 g/L Avicel (microcryst. cellulose) by incubation in **sodium** phosphate buffer (0.05M, pH 7.5) at 20.degree. for 30 min, repeated centrifugation at 4000 rpm for 15 min and 5.degree., freezing the moist sediment, and milling. About 50% of the total cellulase is autoimmobilized by this procedure, and the immobilized cellulase retains full activity as "free" cellulase. The cellulase prepn. has a much lesser effect or influence on the durability or aging behavior of the cellulosic substrate than corresponding unmodified cellulases while at least having as good an effect on the look or feel, when used for treatment of cellulosic fabrics or textiles. The cellulase prepn. may be used for domestic or industrial laundering or fabric softening as an ingredient of a detergent compn., for bio-polishing, or for stone-washing denim fabric or denim jeans or other dyed fabric or garments.

ST cellulase immobilization detergent

IT Sulfates, uses
RL: NUU (Nonbiological use, unclassified); USES (Uses)
(alkyl; cellulases with reduced mobility by immobilization or gel incorporation for use in laundry detergents or fabric softeners)

IT Sulfonic acids, uses
RL: NUU (Nonbiological use, unclassified); USES (Uses)
(alkylarene, **sodium** salts; cellulases with reduced mobility by immobilization or gel incorporation for use in laundry detergents or fabric softeners)

IT Quaternary ammonium compounds, uses
RL: NUU (Nonbiological use, unclassified); USES (Uses)
(alkyltrimethyl, bromides; cellulases with reduced mobility by immobilization or gel incorporation for use in laundry detergents or fabric softeners)

IT Aspergillus
Bacillus (bacterium genus)
Bacillus lautus
Bacteria (Eubacteria)
Detergents
Enzyme immobilization
Fabric softeners
Fungi
Fusarium
Geotrichum
Humicola
Humicola insolens
Microorganism
Myceliophthora
Penicillium
Phanerochaete
Schizophyllum (fungus)
Surfactants
(cellulases with reduced mobility by immobilization or gel incorporation for use in laundry detergents or fabric softeners)

IT Activated charcoal
Albumins, uses
Alkanesulfonates
Antibodies

Bentonite, uses
Diatomite
Glutens
Glycolipids
Lectins
Phospholipids, uses
Polymers, uses
Polyoxyalkylenes, uses
Polysaccharides, uses
Proteins (general), uses
Soybean proteins
Steroidal glycosides
Whey proteins
Zeolites (synthetic), uses
RL: NUU (Nonbiological use, unclassified); USES (Uses)
(cellulases with reduced mobility by immobilization or gel incorporation for use in laundry detergents or fabric softeners)

IT Clay minerals
RL: NUU (Nonbiological use, unclassified); USES (Uses)
(hectorite-like; cellulases with reduced mobility by immobilization or gel incorporation for use in laundry detergents or fabric softeners)

IT Proteins (specific proteins and subclasses)
RL: NUU (Nonbiological use, unclassified); USES (Uses)
(pea; cellulases with reduced mobility by immobilization or gel incorporation for use in laundry detergents or fabric softeners)

IT Proteins (specific proteins and subclasses)
RL: NUU (Nonbiological use, unclassified); USES (Uses)
(potato; cellulases with reduced mobility by immobilization or gel incorporation for use in laundry detergents or fabric softeners)

IT Polyamines (polymeric)
RL: NUU (Nonbiological use, unclassified); USES (Uses)
(secondary; cellulases with reduced mobility by immobilization or gel incorporation for use in laundry detergents or fabric softeners)

IT Alkylaromatic compounds
RL: NUU (Nonbiological use, unclassified); USES (Uses)
(**sodium** alkylarenesulfonates; cellulases with reduced mobility by immobilization or gel incorporation for use in laundry detergents or fabric softeners)

IT 9004-34-6, Cellulose, uses
RL: NUU (Nonbiological use, unclassified); USES (Uses)
(Avicel or Vivicel or Sigmacel; cellulases with reduced mobility by immobilization or gel incorporation for use in laundry detergents or fabric softeners)

IT 7585-39-9, .beta.-Cyclodextrin 7631-86-9, Silica, uses
9000-01-5, Gum arabic 9000-30-0, Guar gum 9000-36-6, Karaya gum
9000-40-2, Locust bean gum 9000-65-1, Tragacanth gum 9000-69-5,
Pectin 9002-18-0, Agar 9002-89-5, Polyvinyl alcohol 9002-98-6,
Polyethylenimine 9003-01-4, Polyacrylic acid 9003-05-8,
Polyacrylamide 9003-39-8, Polyvinylpyrrolidone 9004-30-2,
Carboxymethyl hydroxyethyl cellulose 9004-38-0, Cellulose acetate
phthalate 9004-53-9, Dextrin 9004-54-0, Dextran, uses
9004-58-4, Ethyl hydroxyethyl cellulose 9004-61-9, Hyaluronic acid
9004-62-0, Hydroxyethyl cellulose 9004-65-3, Methyl hydroxypropyl
cellulose 9005-25-8, Starch, uses 9005-38-3, **Sodium**
alginate 9005-53-2, Lignin, uses 9005-80-5, Inulin 9011-85-2,
Quince seed gum 9011-87-4 9012-36-6, Agarose 9012-76-4,

Chitosan 9032-42-2, Methyl hydroxyethyl cellulose 9036-66-2, Arabinogalactan 9041-56-9, Methyl hydroxybutyl cellulose 9050-30-0, Heparan sulfate 9050-31-1, Hydroxypropyl methyl cellulose phthalate 9057-02-7, Pullulan 9062-07-1, .iota.-Carrageenan 9064-57-7, .lambda.-Carrageenan 10016-20-3, .alpha.-Cyclodextrin 11078-31-2, Glucomannan 11114-20-8, .kappa.-Carrageenan 11128-96-4, Amberlite LA-2 11138-66-2, Xanthan gum 25104-18-1, Polylysine 25232-42-2, Polyvinylimidazole 25322-68-3 25608-40-6, Polyaspartic acid 26063-13-8, Polyaspartic acid 30581-59-0, Dimethylaminoethyl methacrylate-N-vinylpyrrolidone copolymer 38000-06-5, Polylysine 50851-57-5 53320-86-8, Laponite 54724-00-4, Curdlan 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate** 84563-76-8 143928-11-4, Chondroitin tetrakis(hydrogen sulfate) (ester) 185323-66-4, Chondroitin octakis(hydrogen sulfate)
RL: NUU (Nonbiological use, unclassified); USES (Uses)
(cellulases with reduced mobility by immobilization or gel incorporation for use in laundry detergents or fabric softeners)

IT 9012-54-8, Cellulase
RL: NUU (Nonbiological use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(cellulases with reduced mobility by immobilization or gel incorporation for use in laundry detergents or fabric softeners)

IT 25014-15-7, Poly(2-vinylpyridine)
RL: NUU (Nonbiological use, unclassified); USES (Uses)
(quaternary; cellulases with reduced mobility by immobilization or gel incorporation for use in laundry detergents or fabric softeners)

L26 ANSWER 15 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1997:41986 HCAPLUS
DN 126:65454
TI Enteric-coated pharmaceutical dosage form for colonic delivery
IN Kelm, Gary Robert; Manring, Gary Lee
PA Procter and Gamble Company, USA
SO PCT Int. Appl., 30 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K009-22
ICS A61K009-24; A61K009-28; A61K009-36; A61K009-62
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9636319	A1	19961121	WO 96-US6986	19960516
	W: JP, MX				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5686106	A	19971111	US 95-442921	19950517
	EP 827398	A1	19980311	EP 96-920227	19960516
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
	US 5814336	A	19980929	US 96-719108	19960924
PRAI	US 95-442921	19950517			
	WO 96-US6986	19960516			

AB The present invention relates to a pharmaceutical compn. in a unit dosage form for peroral administration in a human or lower animal,

having a gastrointestinal tract comprising a small intestine and a colon with a lumen therethrough having an inlet to the colon from the small intestine, comprising: (a) a safe and effective amt. of a therapeutically active agent incorporated into or coated on the surface of a dosage form selected from the group consisting of a spherical substrate, an elliptical substrate, a hard capsule, or a compressed tablet, with a max. diam. of 3-10 mm and (b) an enteric polymer coating material. The dosage form has a smooth surface free from edges or sharp curves; the elliptical substrate and the hard capsule have a ratio of the long to short diams. of .ltoreq.1.5; the therapeutically active agent is released at a point near the inlet to, or within the colon; the enteric polymer coating material begins to dissolve in an aq. media at a pH 5-6.3; and the enteric polymer coating material has a coating thickness of .gtoreq.250 .mu.m. A soft gelatin capsule contg. propanolol 15, Captex 300 63, ethoxylated castor oil 2, and Poloxamer-182 20 mg was coated with an enteric-coating compn. contg. cellulose acetate phthalate 70 and di-Bu phthalate 18 mg.

ST cellulose acetate phthalate drug enteric coating

IT Proteins (specific proteins and subclasses)
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(biol. active; enteric-coated dosage forms for colonic delivery)

IT Antiasthmatics
Antidiarrheals
Antihistamines
Antimicrobial agents
Calcium channel blockers
Chemotherapy
H2 receptor antagonists
Immunosuppressants
.beta.-Adrenoceptor antagonists
(enteric-coated dosage forms for colonic delivery)

IT Glucocorticoids
Peptides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(enteric-coated dosage forms for colonic delivery)

IT Capsules (drug delivery systems)
(enteric-coated soft; enteric-coated dosage forms for colonic delivery)

IT Drug delivery systems
(enteric-coated, sugar spheres; enteric-coated dosage forms for colonic delivery)

IT Capsules (drug delivery systems)
(enteric-coated; enteric-coated dosage forms for colonic delivery)

IT Anti-inflammatory drugs
(nonsteroidal; enteric-coated dosage forms for colonic delivery)

IT Glucosides
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sennosides; enteric-coated dosage forms for colonic delivery)

IT 50-02-2, Dexamethasone 89-57-6, Mesalamine 525-66-6, Propranolol 9004-38-0, Cellulose acetate phthalate 9007-12-9, Calcitonin 9050-31-1, Hydroxypropyl methyl cellulose phthalate 10040-34-3 25086-15-1, Methacrylic acidmethyl methacrylate copolymer 25212-88-8 51822-44-7 52907-01-4, Cellulose acetate trimellitate 53237-50-6 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(enteric-coated dosage forms for colonic delivery)

IT 9015-82-1, Angiotensin-converting enzyme
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; enteric-coated dosage forms for colonic delivery)

L26 ANSWER 16 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1996:646378 HCAPLUS
DN 125:284911
TI New oral pharmaceutical formulation and process for making dosage forms comprising two functionally different layers in one manufacturing step
IN Lundberg, Per Johan; Loevgren, Kurt
PA Astra Aktiebolag, Swed.
SO PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K009-30
ICS A61K031-44; A61K047-18
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9624338	A1	19960815	WO 96-SE161	19960209
	W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE				
	CA 2186037	AA	19960815	CA 96-2186037	19960209
	AU 9646839	A1	19960827	AU 96-46839	19960209
	AU 695774	B2	19980820		
	EP 752851	A1	19970115	EP 96-902579	19960209
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	CN 1146720	A	19970402	CN 96-190090	19960209
	BR 9605121	A	19971014	BR 96-5121	19960209
	JP 09511768	T2	19971125	JP 96-524209	19960209
	NO 9604271	A	19961008	NO 96-4271	19961008
	FI 9604028	A	19961008	FI 96-4028	19961008
PRAI	SE 95-478	19950209			
	WO 96-SE161	19960209			

OS MARPAT 125:284911
AB A new oral pharmaceutical dosage form comprising a core material that contains a proton pump inhibitor, one or more alk. reacting compds. and optionally pharmaceutical excipients having a water sol. sepg. layer and an enteric coating layer is claimed. The core material as such is alk. reacting and the sepg. layer between the alk. reacting core material and the enteric coating layer is formed in situ as a water sol. salt between the alk. reacting compd.(s) and the enteric coating polymer. The invention also describes a new efficient process for the manuf. of such a dosage form comprising two functionally different layers in one manufg. step, and its use in medicine.
ST enteric coated tablet proton pump inhibitor
IT Biological transport
(of protons, inhibitors of; oral pharmaceutical formulation and process for making dosage forms comprising two functionally

different layers in one manufg. step)

IT Antacids and Antiflatulents
(oral pharmaceutical formulation and process for making dosage forms comprising two functionally different layers in one manufg. step)

IT Amino acids, biological studies
RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(oral pharmaceutical formulation and process for making dosage forms comprising two functionally different layers in one manufg. step)

IT **Alkali metal** hydroxides
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(oral pharmaceutical formulation and process for making dosage forms comprising two functionally different layers in one manufg. step)

IT Pharmaceutical dosage forms
(capsules, oral pharmaceutical formulation and process for making dosage forms comprising two functionally different layers in one manufg. step)

IT Pharmaceutical dosage forms
(enteric-coated, oral pharmaceutical formulation and process for making dosage forms comprising two functionally different layers in one manufg. step)

IT Pharmaceutical dosage forms
(pellets, oral pharmaceutical formulation and process for making dosage forms comprising two functionally different layers in one manufg. step)

IT Pharmaceutical dosage forms
(tablets, oral pharmaceutical formulation and process for making dosage forms comprising two functionally different layers in one manufg. step)

IT 9004-34-6, Cellulose, biological studies
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(microcryst.; oral pharmaceutical formulation and process for making dosage forms comprising two functionally different layers in one manufg. step)

IT 56-87-1, Lysine, biological studies 70-26-8, Ornithine 71-00-1, Histidine, biological studies 74-79-3, Arginine, biological studies 77-86-1, Tromethamine 6284-40-8, N-Methyl-D-glucamine
RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(oral pharmaceutical formulation and process for making dosage forms comprising two functionally different layers in one manufg. step)

IT 57-50-1, Sucrose, biological studies 69-65-8, Mannitol 77-93-0, Triethylcitrate 151-21-3, **Sodium** laurylsulfate, biological studies 557-04-0, **Magnesium** stearate 4070-80-8, **Sodium** stearylfumarate 9003-39-8D, Polyvinylpyrrolidone, cross-linkage products 9004-64-2D, Hydroxypropyl cellulose, derivs. 9005-25-8, Corn starch, biological studies 9063-38-1, **Sodium** starch glycolate 10028-24-7, Disodium hydrogen phosphate dihydrate 14807-96-6,

Talc, biological studies 25086-15-1, Methacrylic acid-methyl methacrylate copolymer 25212-88-8, Eudragit L30D-55 25322-68-3 73590-58-6, Omeprazole 76974-66-8, Hydroxypropyl **cellulose acetate succinate** 95382-33-5 102625-70-7, Pantoprazole 103577-45-3, Lansoprazole
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(oral pharmaceutical formulation and process for making dosage forms comprising two functionally different layers in one manufg. step)

IT 9000-83-3, Atpase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(proton-dependent, inhibitors; oral pharmaceutical formulation and process for making dosage forms comprising two functionally different layers in one manufg. step)

L26 ANSWER 17 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1996:605428 HCAPLUS
DN 125:230811
TI Dispersants for coating slow-release pharmaceuticals
IN Maruyama, Naoaki; Kokubo, Hiroyasu
PA Shinetsu Chem Ind Co, Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM A61K047-38
ICS A61K009-28; A61K009-52
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 08198778	A2	19960806	JP 95-8199	19950123

AB Compns. for coating slow-release pharmaceuticals comprises C>10 aliph. alcs., fatty acids and/or glycerin fatty acid esters 100, anionic surfactants 10-30, nonionic surfactants .ltoreq.30, and water .ltoreq.10 wt. parts. The compns. are made into emulsions, dild. with water, and to this is dispersed with cellulose polymers to form a dispersion for coating e.g . propantheline bromide granules. The prepns. showed an excellent slow-release rate.
ST dispersion pharmaceutical coating; aliph alc dispersion pharmaceutical coating; fatty acid dispersion pharmaceutical coating; glycerin ester dispersion pharmaceutical coating; surfactant dispersion pharmaceutical coating
IT Coating materials
Dispersion
Particle size
Solution rate
(dispersant compns. suitable for coating slow-release pharmaceuticals)
IT Fatty acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(dispersant compns. suitable for coating slow-release pharmaceuticals)
IT Alcohols, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(aliph., dispersant compns. suitable for coating slow-release pharmaceuticals)

IT Surfactants
(anionic, dispersant compns. suitable for coating slow-release pharmaceuticals)
IT Fatty acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(esters, dispersant compns. suitable for coating slow-release pharmaceuticals)
IT Pharmaceutical dosage forms
(granules, slow-release, dispersant compns. suitable for coating slow-release pharmaceuticals)
IT Surfactants
(nonionic, dispersant compns. suitable for coating slow-release pharmaceuticals)
IT Pharmaceutical dosage forms
(slow-release, dispersant compns. suitable for coating slow-release pharmaceuticals)
IT 50-34-0, Propantheline bromide 56-81-5D, Glycerol, fatty acid esters 57-10-3, Palmitic acid, biological studies 57-11-4, Stearic acid, biological studies 112-53-8, 1-Dodecanol 112-92-5, Stearyl alcohol 143-07-7, Lauric acid, biological studies 151-21-3, **Sodium** lauryl sulfate, biological studies 544-63-8, Myristic acid, biological studies 8049-47-6, Pancreatin 9004-32-4 9004-34-6D, Cellulose, polymers 9004-38-0, Cellulose acetate phthalate 9004-57-3, Ethyl cellulose 9005-65-6, Polysorbate 80 9050-31-1, Hydroxypropylmethyl cellulose phthalate 31566-31-1, Glycerin monostearate 36653-82-4, Cetyl alcohol 52907-01-4, Cellulose acetate trimellitate 71138-97-1, Hydroxypropylmethyl **cellulose acetate succinate**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(dispersant compns. suitable for coating slow-release pharmaceuticals)

L26 ANSWER 18 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1996:508629 HCAPLUS
DN 125:177234
TI Modulation of protein release from chitosan-alginate microcapsules using the pH-sensitive polymer hydroxypropyl methyl **cellulose acetate succinate**
AU Okhamafe, A. O.; Amsden, B.; Chu, W.; Goosen, M. F. A.
CS Dep. of Pharmaceutics and Pharmaceutical Technology, Univ. of Benin, Benin City, Nigeria
SO J. Microencapsulation (1996), 13(5), 497-508
CODEN: JOMIEF; ISSN: 0265-2048
DT Journal
LA English
CC 63-5 (Pharmaceuticals)
AB The release characteristics of protein from chitosan-alginate microcapsules prepd. using an electrostatic droplet generator were evaluated. The release studies were undertaken in-vitro in simulated gastrointestinal fluids covering the pH range 1.2-8. Chitosan-alginate microcapsules showed unsatisfactory release properties, losing 94% of the encapsulated proteins (bovine serum albumin) over a 24 h period at pH 1.2. Incorporation of a pH-sensitive polymer, hydroxypropyl methylcellulose acetate succinate (HPMCAS), in the microcapsules, by coating the capsule membrane as well as blending with the capsule core polymer in varying ratios, produced significant changes in the release profiles of the microcapsules. At pH 1.2, the modified microcapsules

retained up to 60% of the encapsulated protein after 24 h. The results obtained highlight the potential of HPMCAS as a release-modifier in chitosan-alginate microcapsules.

ST microcapsule chitosan alginate protein release; cellulose deriv microcapsule protein release

IT Solution rate
(modulation of protein release from chitosan-alginate microcapsules using pH-sensitive hydroxypropyl Me **cellulose acetate succinate**)

IT Proteins, biological studies
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(modulation of protein release from chitosan-alginate microcapsules using pH-sensitive hydroxypropyl Me **cellulose acetate succinate**)

IT Pharmaceutical dosage forms
(microcapsules, modulation of protein release from chitosan-alginate microcapsules using pH-sensitive hydroxypropyl Me **cellulose acetate succinate**)

IT 9005-38-3, **Sodium** alginate 9012-76-4, Chitosan 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate**
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(modulation of protein release from chitosan-alginate microcapsules using pH-sensitive hydroxypropyl Me **cellulose acetate succinate**)

L26 ANSWER 19 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1996:479452 HCAPLUS
DN 125:123766
TI Sustained-release pharmaceutical compositions of disopyramide phosphate
IN Shibahara, Sadaichi; Sakata, Tasuke; Yono, Mitsuhiro; Hirooka, Yukio; Takahashi, Tetsuya
PA Taisho Yakuhin Kogyo Kk, Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM A61K031-44
ICS A61K009-16; A61K009-20; A61K047-32; A61K047-38
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08133975	A2	19960528	JP 94-271153	19941104

AB Sustained-release pharmaceutical compns. of disopyramide phosphate are prepd. by mixing the active ingredient with insol. matrix bases selected from Et cellulose, Et acrylate-Me methacrylate copolymer and aminoalkyl methacrylate copolymer-RS and .gtoreq.1 binders selected from hydroxypropyl Me cellulose phthalate, hydroxypropylmethyl **cellulose acetate succinate**, CM-cellulose, methacrylate copolymer, hydroxypropyl cellulose, hydroxypropylmethyl cellulose, polyvinyl acetal diethylaminoacetate and aminoalkyl methacrylate copolymer-E and compressing to form sustained-release solid prepns. The prepns. showed max. blood disopyramide phosphate concn. at approx. 4 h after

administration and declined concn. there after up to 12 h posttreatment.
ST sustained release pharmaceutical disopyramide phosphate
IT Drug bioavailability
Solution rate
(sustained-release pharmaceutical compns. of disopyramide phosphate)
IT Vinyl acetal polymers
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
((diethylamino)acetals, sustained-release pharmaceutical compns. of disopyramide phosphate)
IT Pharmaceutical dosage forms
(sustained-release, sustained-release pharmaceutical compns. of disopyramide phosphate)
IT Pharmaceutical dosage forms
(tablets, sustained-release, sustained-release pharmaceutical compns. of disopyramide phosphate)
IT 9004-57-3, Ethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hydroxypropylmethyl cellulose 9010-88-2, Ethyl acrylatemethyl methacrylate copolymer 9050-04-8, **Calcium** CM-cellulose 9050-31-1, Hydroxypropyl methyl cellulose phthalate 18358-13-9D, Methacrylate, Aminoalkyl, copolymers, biological studies 18358-13-9D, Methacrylate, aminoalkyl, copolymers, biological studies 18358-13-9D, Methacrylate, copolymers, biological studies 22059-60-5, Disopyramide phosphate 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sustained-release pharmaceutical compns. of disopyramide phosphate)

L26 ANSWER 20 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1996:431271 HCAPLUS
DN 125:67842
TI Manufacture of cellulose powders for enteric coating of solid preparations
IN Maruyama, Naoaki; Kokubo, Hiroyasu; Nakamura, Shinichiro; Muto, Yasuaki
PA Shinetsu Chem Ind Co, Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM A61K009-28
ICS A61K047-38
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 08109124	A2	19960430	JP 94-280160	19941115
PRAI JP 94-195468		19940819		

AB The powders are manufd. by dissolving of water-insol. cellulose polymers in solvents, which at least contain org. solvents capable of being miscible with H2O at an arbitrary ratio and may addnl. contain H2O or org. solvents incapable of being miscible with H2O, mixing of the polymer soln. obtained with H2O, removal of the org. solvents from the soln. so that av. particle size of the polymer becomes .ltoreq.1 .mu.m, addn. of anionic surfactants to the concd. polymer soln., and then spray-drying of the soln. at intake air

temp. .ltoreq.110.degree. and exhaust air temp. .ltoreq.65.degree.. The powders provide coating solns. with high acid resistance and good-forming property. HP-55 (hydroxypropyl Me cellulose phthalate) was dissolved in EtOH/H2O (8:2) and the soln. was emulsified by addn. of H2O. The emulsion obtained was evapd. under vacuum and ultrafiltrated to the solid content 10 wt.%. and the concd. matter contg. HP-55 with av. particle size 0.3 .mu.m was, after addn. of **Na** lauryl sulfate, spray-dried at intake air temp. 95.degree. and exhaust temp. 60.degree. to give a powder, which was well dispersed in H2O. A glass plate was cast-coated with an aq. emulsion of the powders and trityl citrate to give a transparent film. The film was soaked in artificial gastric juice (pH 1.2) at 37.degree. for 2 h to show no change in the appearance. A control powders obtained by drying at intake air temp. 120.degree. failed to be dispersed in H2O.

ST enteric coating cellulose powder manuf; spray drying enteric coating cellulose

IT Surfactants
(anionic, manuf. of cellulose powders for enteric coating of solid prepns. by spray-drying under control of intake and exhaust air temp.)

IT Pharmaceutical dosage forms
(enteric, manuf. of cellulose powders for enteric coating of solid prepns. by spray-drying under control of intake and exhaust air temp.)

IT Drying
(spray, manuf. of cellulose powders for enteric coating of solid prepns. by spray-drying under control of intake and exhaust air temp.)

IT 64-17-5, Ethanol, uses 67-63-0, Isopropanol, uses 67-64-1, Acetone, uses 78-93-3, Methyl ethyl ketone, uses 151-21-3, **Sodium** lauryl sulfate, uses 577-11-7, Dioctyl **sodium** sulfosuccinate
RL: NUU (Nonbiological use, unclassified); USES (Uses)
(manuf. of cellulose powders for enteric coating of solid prepns. by spray-drying under control of intake and exhaust air temp.)

IT 9004-38-0, Cellulose acetate phthalate 9004-57-3, Ethyl cellulose 9050-31-1, HP-55 37205-99-5, Carboxymethyl ethyl cellulose 52907-01-4, Cellulose acetate trimellitate 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate**
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(manuf. of cellulose powders for enteric coating of solid prepns. by spray-drying under control of intake and exhaust air temp.)

IT 67-56-1, Methanol, uses
RL: NUU (Nonbiological use, unclassified); USES (Uses)
(solvent; manuf. of cellulose powders for enteric coating of solid prepns. by spray-drying under control of intake and exhaust air temp.)

=> d l26 all 21-40

L26 ANSWER 21 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1996:422418 HCAPLUS
DN 125:67746
TI Enteric film coating compositions for coating pharmaceutical tablets
IN Mehra, Dev K.; Ramireddy, Chittamuru; Tang, Li-Juan; Porter, Stuart C.
PA Berwind Pharmaceutical Services, Inc., USA; Mehra, Dev, K.; Ramireddy, Chittamuru; Tang, Li-Juan; Porter, Stuart, C.
SO PCT Int. Appl., 62 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K009-36
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9610995	A1	19960418	WO 95-US12934	19951006
	W: AL, AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ				
	RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	US 5733575	A	19980331	US 94-319987	19941007
	ZA 9508147	A	19960716	ZA 95-8147	19950927
	AU 9539513	A1	19960502	AU 95-39513	19951006
	AU 684398	B2	19971211		
	EP 781125	A1	19970702	EP 95-937388	19951006
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
	JP 10506913	T2	19980707	JP 95-512671	19951006
	HU 77774	A2	19980828	HU 98-732	19951006
PRAI	US 94-319987	19941007			
	WO 95-US12934	19951006			

AB A non-toxic edible enteric film coating dry powder compn. for use in making an aq. enteric coating suspension which may be used in coating pharmaceutical tablets and the like comprises an enteric film forming polymer, a detackifier, a viscosity modifier, and an alkalizing/anti-coagulating agent. Advantageously, the inventive dry powder compns. may include a solid plasticizer, a lubricant, an anti-caking agent, a liq. plasticizer, and a pigment. An enteric film coating compn. contained PVAP-T (titanized polyvinyl acetate phthalate) 85.0, talc-400 12, stearic acid 2.60, **sodium** alginate 1.80, PEG-3350 12.00, Citroflex-2 2.40, **sodium** bicarbonate 3.00, and Cabosil EH5 1.20%.
ST enteric film coating pharmaceutical tablet; PVAP talc PEG enteric film coating; stearic acid alginate enteric film coating; bicarbonate PVAP talc enteric film coating
IT Agglomeration preventers
Lubricants
Plasticizers
(enteric film coating compns. for coating pharmaceutical tablets contg.)

IT **Alkali metal** hydroxides
Castor oil
Polymers, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(enteric film coating compns. for coating pharmaceutical tablets contg.)

IT Tackifiers
(de-, enteric film coating compns. for coating pharmaceutical tablets contg.)

IT Dyes
(lakes, FD&C and D&C; enteric film coating compns. for coating pharmaceutical tablets contg.)

IT Pharmaceutical dosage forms
(tablets, enteric film coating compns. for coating pharmaceutical tablets contg.)

IT 50-78-2, Aspirin 56-81-5, Glycerol, biological studies 57-11-4, Stearic acid, biological studies 77-89-4, Acetyltriethyl citrate 77-93-0, Triethyl citrate 84-66-2, Diethyl phthalate 102-76-1, Glyceryl triacetate 109-43-3, Dibutyl sebacate 144-55-8, **Sodium** bicarbonate, biological studies 298-14-6, **Potassium** bicarbonate 506-87-6, Ammonium carbonate 546-93-0, **Magnesium** carbonate 1066-33-7, Ammonium bicarbonate 1305-62-0, **Calcium** hydroxide, biological studies 1309-42-8, **Magnesium** hydroxide 1309-48-4, **Magnesium** oxide, biological studies 1310-58-3, **Potassium** hydroxide, biological studies 1310-73-2, **Sodium** hydroxide, biological studies 7631-86-9, Silica, biological studies 7632-05-5, **Sodium** phosphate 9000-07-1, Carrageenan 9003-39-8, Pvp 9004-32-4, **Sodium** carboxymethyl cellulose 9004-38-0, Cellulose acetate phthalate 9004-62-0, Hydroxyethyl cellulose 9004-65-3, Hydroxypropyl methyl cellulose 9005-38-3, **Sodium** alginate 11138-66-2, Xanthan gum 13463-67-7, Titanium dioxide, biological studies 14807-96-6, Talc, biological studies 15307-79-6, **Sodium** diclofenac 16068-46-5, **Potassium** phosphate 25322-68-3, Peg 53237-50-6D, titanized and jet milled 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate** 110268-21-8, Opadry 144892-73-9, Aluminum hydrate
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(enteric film coating compns. for coating pharmaceutical tablets contg.)

IT 37220-17-0, Konjak mannan
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(flour; enteric film coating compns. for coating pharmaceutical tablets contg.)

L26 ANSWER 22 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1996:138145 HCAPLUS
DN 124:212090
TI Nicardipine granules for sustained-release preparations
IN Maeyama, Shigeru; Nakagawa, Hisashi
PA Towa Yakuhin Kk, Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM A61K031-455
ICS A61K031-455; A61K009-16; A61K047-26; A61K047-32; A61K047-36;

A61K047-38
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07330606	A2	19951219	JP 94-151561	19940608

AB The granules are obtained by coating of small particular nuclei with a layer contg. crystals of nicardipine (I) or its salts and an enteric-sol. base. The granules may be further coated with a layer contg. an enteric-sol. base or a water-sol. or water-swellable base. The granules show good dissolving property in weakly acidic or neutral environment as in intestine although I is in the crystal form. Crystal of I.HCl was fed to a fluidized-bed granulator contg. Nonpareil (av. particle size 500-750 .mu.m) while spraying an EtOH soln. of Eudragit LD 100 and the granules obtained were further spray-coated with a compn. contg. Eudragit RS, Macrogol 6000, talc, H2O, and EtOH to give a sustained-release granule prepn. Dissoln. rate of I from the prepn. was 100% after 10 min as well as a control prepd. by coating of Nonpareil with a compn. contg. amorphous I.HCl, Eudragit L 100, and polysorbate, MeOH, and CH2Cl2.

ST nicardipine crystal sustained release granule

IT Surfactants
Vasodilators
(nicardipine sustained-release granules prepd. by coating of nuclei with layer contg. nicardipine crystal and enteric-sol. base)

IT Glycerides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nicardipine sustained-release granules prepd. by coating of nuclei with layer contg. nicardipine crystal and enteric-sol. base)

IT Pharmaceutical dosage forms
(granules, sustained-release, nicardipine sustained-release granules prepd. by coating of nuclei with layer contg. nicardipine crystal and enteric-sol. base)

IT Castor oil
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hydrogenated, ethoxylated, nicardipine sustained-release granules prepd. by coating of nuclei with layer contg. nicardipine crystal and enteric-sol. base)

IT 57-50-1, Sucrose, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Nonpareil; nicardipine sustained-release granules prepd. by coating of nuclei with layer contg. nicardipine crystal and enteric-sol. base)

IT 54527-84-3, Nicardipine hydrochloride 55985-32-5, Nicardipine
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nicardipine sustained-release granules prepd. by coating of nuclei with layer contg. nicardipine crystal and enteric-sol. base)

IT 63-42-3, Lactose 151-21-3, **Sodium** lauryl sulfate, biological studies 9004-34-6, Cellulose, biological studies 9005-25-8, Starch, biological studies 9005-67-8, Polysorbate 60 9032-35-3, **Cellulose acetate succinate** 9050-31-1, Hydroxypropyl methyl cellulose phthalate 12441-09-7D, Sorbitan, fatty acid esters 70535-77-2 174514-90-0, Eudragit LD 100
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(nicardipine sustained-release granules prepd. by coating of nuclei with layer contg. nicardipine crystal and enteric-sol. base)

IT 9004-57-3, Ethyl cellulose 9004-62-0, Hydroxyethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose 25322-68-3, Polyethylene glycol 33434-24-1, Eudragit RS 37205-99-5, Carboxymethyl ethyl cellulose
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(outer layer; nicardipine sustained-release granules prepd. by coating of nuclei with layer contg. nicardipine crystal and enteric-sol. base)

L26 ANSWER 23 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1996:137681 HCAPLUS
DN 124:185554
TI New oral pharmaceutical compositions containing erythromycin
IN Birrenbach, Gerd; Juch, Rolf Dieter
PA Spirig AG Pharmazeutische Praeparate, Switz.
SO Eur. Pat. Appl., 7 pp.
CODEN: EPXXDW
DT Patent
LA German
IC ICM A61K031-71
ICS A61K009-16; A61K009-50
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 689840	A1	19960103	EP 95-810428	19950626
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
PRAI CH 94-2048		19940628		

AB Erythromycin-contg. ground pellets show good drug-releasing properties in the digestive tract when mixed with a weak acid such as **potassium** dihydrogen phosphate. The pellets are coated with an enteric-coating polymer and contain additives, e.g., plasticizers. Thus, pellets were prepd. from erythromycin 90.0, **potassium** dihydrogen phosphate 4.0, and microcryst. cellulose 6.0 g. These pellets were coated with a compn. consisting of cellulose acetate phthalate 20.0, acetyl triethylcitrate 4.8, and Mg stearate 2.2%.

ST erythromycin pharmaceutical pellet; plasticizer enteric polymer erythromycin pellet

IT Plasticizers
(oral pharmaceutical compns. contg. erythromycin base)

IT Kaolin, biological studies
Polymers, biological studies
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oral pharmaceutical compns. contg. erythromycin base)

IT Castor oil
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hydrogenated, oral pharmaceutical compns. contg. erythromycin base)

IT Glycerides, biological studies
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(mono-, acetates, oral pharmaceutical compns. contg. erythromycin base)
IT Pharmaceutical dosage forms
(pellets, oral pharmaceutical compns. contg. erythromycin base)
IT 63-42-3, Lactose 69-79-4, Maltose 77-89-4, Acetyl triethylcitrate 77-93-0, Triethyl citrate 84-66-2, Diethyl phthalate 102-76-1, Glycerin triacetate 144-33-2, DiSodium hydrogen citrate 557-04-0, **Magnesium** stearate 866-83-1, **Potassium** dihydrogen citrate 868-14-4, **Potassium** hydrogen tartrate 877-24-7, **Potassium** hydrogen phthalate 7558-80-7, **Sodium** dihydrogen phosphate 7757-93-9, Dicalcium phosphate 7778-77-0 9004-32-4, Cellulose, carboxymethyl ether, **sodium** salt 9004-34-6, Cellulose, biological studies 9004-38-0, Cellulose acetate phthalate 9005-25-8, Starch, biological studies 14807-96-6, Talc, biological studies 25212-88-8, Ethyl acrylate-methacrylic acid copolymer 25322-68-3, PEG 29059-00-5, Dipropylene glycol dipelargonate 30233-64-8, Glycerin monobehenate 53237-50-6 71138-97-1, Hydroxypropyl methyl **Cellulose acetate succinate**
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oral pharmaceutical compns. contg. erythromycin base)
IT 114-07-8, Erythromycin
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oral pharmaceutical compns. contg. erythromycin base)

L26 ANSWER 24 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1996:134227 HCAPLUS
DN 124:185598
TI Duloxetine enteric pellets
IN Anderson, Neil Robert; Oren, Peter Lloyd; Ogura, Toshihiro; Fujii, Toshiro
PA Lilly, Eli, and Co., USA; Shionogi and Co., Ltd.
SO Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM A61K031-38
ICS A61K009-36
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 693282	A2	19960124	EP 95-304977	19950717
	EP 693282	A3	19961218		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
	US 5508276	A	19960416	US 94-276232	19940718
	CA 2153856	AA	19960119	CA 95-2153856	19950713
	NO 9502786	A	19960119	NO 95-2786	19950713
	HU 72466	A2	19960429	HU 95-2134	19950714
	AU 9525051	A1	19960201	AU 95-25051	19950717
	AU 686384	B2	19980205		
	JP 08040895	A2	19960213	JP 95-180026	19950717
	BR 9503346	A	19960227	BR 95-3346	19950717
	CN 1128141	A	19960807	CN 95-108414	19950717
PRAI	US 94-276232		19940718		

AB A superior enteric formulation of the antidepressant drug,

duloxetine, is in the form of enteric pellets of which the enteric layer comprises hydroxypropylmethyl **cellulose acetate succinate.**

ST duloxetine enteric pellet

IT Beeswax
(duloxetine enteric pellets)

IT 9003-39-8, Polyvinylpyrrolidone
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(crosslinked; duloxetine enteric pellets)

IT 57-50-1, biological studies 57-55-6, 1,2-Propanediol, biological studies 77-93-0, Triethyl citrate 5965-66-2, .beta.-Lactose 7631-86-9, Silicon dioxide, biological studies 9004-32-4 9004-64-2, Hydroxypropyl cellulose 9005-25-8, Starch, biological studies 9005-65-6, Polysorbate 80 13463-67-7, Titanium dioxide, biological studies 25155-30-0, **Sodium** dodecylbenzenesulfonate 25322-68-3 71138-97-1, Hydroxypropylmethyl **cellulose acetate succinate** 116539-59-4, Duloxetine
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(duloxetine enteric pellets)

L26 ANSWER 25 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1996:30068 HCAPLUS
DN 124:97753
TI Controlled-release tablet formulation having an osmotic core and a coating
PA Andrx Pharmaceuticals, Inc., USA
SO U.S., 5 pp.
CODEN: USXXAM
DT Patent
LA English
IC A61K009-22
NCL 424464000
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5458887	A	19951017	US 94-204825	19940302

AB A controlled-release dosage form comprises (1) an osmotic core contg. a drug-contg. phase which includes a water-swellable component and (2) a continuous coating which comprises a major amt. of a water-resistant polymer and a minor amt. of a nontoxic, water-sol., pharmaceutically acceptable compd. (e.g. a salt) which dissolves in gastrointestinal fluid, forming a plurality of micropores in the coating. The osmotic agent in the core is NaCl or another inorg. or org. salt, urea, sucrose, or citric acid. Thus, tablet cores contained pseudoephedrine-HCl 79.34, povidone 9.4, PEO 5.24, NaCl 3.00, and Myvatex (lubricant) 3.00 wt.%. The cores were spray coated with a mixt. of cellulose acetate 7.35, NaCl 1.47, triacetin 2.12, and acetone 40.0 wt.% to an amt. 11% of the wt. of the cores. These tablets released pseudoephedrine-HCl into water over 24 h when tested by the paddle method.

ST osmotic coated tablet controlled release drug

IT Swelling agents
(controlled-release tablet formulation having osmotic core and coating)

IT Pore
(formation of, in coating; controlled-release tablet formulation having osmotic core and coating)

IT Polymers, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(water-resistant; controlled-release tablet formulation having osmotic core and coating)
IT Pharmaceutical dosage forms
(tablets, controlled-release, controlled-release tablet formulation having osmotic core and coating)
IT 345-78-8, Pseudoephedrine hydrochloride
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(controlled-release tablet formulation having osmotic core and coating)
IT 57-13-6, Urea, biological studies 57-50-1, biological studies 77-92-9, biological studies 107-25-5D, polymers 497-19-8, **Sodium** carbonate, biological studies 534-15-6D, Acetaldehyde dimethyl acetal, polymers 556-32-1, **Magnesium** succinate 814-80-2, **Calcium** lactate 3983-19-5, **Calcium** bicarbonate 7447-40-7, **Potassium** chloride, biological studies 7447-41-8, **Lithium** chloride, biological studies 7487-88-9, **Magnesium** sulfate, biological studies 7647-14-5, **Sodium** chloride (NaCl), biological studies 7757-82-6, **Sodium** sulfate, biological studies 7778-77-0, **Potassium** acid phosphate 7778-80-5, **Potassium** sulfate, biological studies 7786-30-3, **Magnesium** chloride, biological studies 9000-40-2D, Locust bean gum, triacetate 9004-35-7 9004-36-8, Cellulose acetate butyrate 9004-38-0, Cellulose acetate phthalate 9004-39-1, Cellulose acetate propionate 9004-57-3, Ethylcellulose 9004-65-3, Hydroxypropylmethylcellulose 9012-09-3, Cellulose triacetate 9032-35-3, **Cellulose acetate succinate** 9040-62-4, Amylose triacetate 9041-69-4, Cellulose acetate p-toluenesulfonate 10377-48-7, **Lithium** sulfate 24937-78-8D, hydroxylated 25322-68-3 39382-07-5, Cellulose acetate chloroacetate 97089-05-9, Cellulose acetate methyl carbamate 110540-08-4 118440-35-0, Agar acetate 118440-59-8, Cellulose acetate ethyl carbonate 118440-60-1 118441-60-4 172825-34-2 172825-35-3 172825-36-4
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(controlled-release tablet formulation having osmotic core and coating)

L26 ANSWER 26 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1995:905444 HCAPLUS
DN 123:322105
TI Oral synthetic peptide preparation
IN Yamakawa, Tomio; Hiyama, Akio
PA Nippon Chemiphar Co., Ltd., Japan
SO PCT Int. Appl., 17 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
IC ICM A61K038-08
ICS A61K038-09; A61K038-24; A61K038-35; A61K009-28; A61K047-18; A61K047-20; A61K047-32; A61K047-38; A61K047-42
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI WO 9522981 A1 19950831 WO 95-JP282 19950224
W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, KG, KR, KZ, LK, LR, LT, LV, MD, MG, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TT, UA, US, UZ, VN
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
AU 9518241 A1 19950911 AU 95-18241 19950224
JP 07285879 A2 19951031 JP 95-61941 19950224
PRAI JP 94-51180 19940224
WO 95-JP282 19950224
AB An oral prepn. is produced by covering a core material with an enteric coating, wherein the core material comprises a compn. contg. a peptide that has the effect of promoting behavior or relieving learning disorder and a pharmacol. effect represented by bell-shaped curve, such as pGlu-Asn-Ser-Pro-Arg-Gly-NH2, and a protease inhibitor. Enteric-coated tablets were formulated contg. pGlu-Asn-Ser-Pro-Arg-Gly-NH2 60 .mu.g, camostat mesylate 20, mannitol 150, crys. cellulose 100, corn starch 30, plyvinylpyrrolidone 5, and **magnesium** stearate 1mg.
ST peptide oral pharmaceutical learning behavior
IT Memory, biological
(learning; oral synthetic peptide prepns. for promoting learning behavior and relieving learning disorder)
IT Learning
(oral synthetic peptide prepns. for promoting learning behavior and relieving learning disorder)
IT Peptides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oral synthetic peptide prepns. for promoting learning behavior and relieving learning disorder)
IT Pharmaceutical dosage forms
(granules, oral synthetic peptide prepns. for promoting learning behavior and relieving learning disorder)
IT Pharmaceutical dosage forms
(oral, enteric-coated; oral synthetic peptide prepns. for promoting learning behavior and relieving learning disorder)
IT Pharmaceutical dosage forms
(tablets, enteric-coated; oral synthetic peptide prepns. for promoting learning behavior and relieving learning disorder)
IT 79-41-4D, copolymers 4037-01-8, ACTH(4-10) 9004-38-0, Cellulose acetate phthalate 9034-40-6, LH_RH 9050-31-1, Hydroxypropyl methyl cellulose phthalate 9087-70-1, Aprotinin 11000-17-2, Vasopressin 16679-58-6, Desmopressin 27724-96-5, Cetraxate hydrochloride 37205-61-1, Protease inhibitor 37205-99-5, Carboxymethyl ethyl cellulose 50913-82-1 56974-61-9, Gabexate mesylate 59721-29-8, Camostat mesylate 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate** 105250-86-0, Ebiratide 132925-64-5 132925-74-7 170020-48-1
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oral synthetic peptide prepns. for promoting learning behavior and relieving learning disorder)

L26 ANSWER 27 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1995:884693 HCAPLUS
DN 123:296656
TI Nicardipine hydrochloride treated with mannitol and polymers and sustained-release preparations
IN Ogura, Hidetoshi; Ito, Madoka; Imai, Eiji

PA Taiyo Pharma Ind, Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM A61K031-455
ICS A61K031-455; A61K009-14; A61K009-48; A61K047-10; A61K047-32; A61K047-38
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07223956	A2	19950822	JP 94-35164	19940209

AB Crystal of nicardipine-HCl (I) treated with D-mannitol (II) and polymer base for sustained-release prepns. and sustained-release prepns. obtained by further treatment of the treated I with another polymer base are claimed. The 1st treatment increases dissoln. rate of I in intestinal tracts and the 2nd treatment controls dissoln. amts. of I in stomach and intestine. A mixt. of I 20, II 7, and methacrylic acid copolymer L 10 g was dissolved in MeOH, the soln. was dried, and the dried matter was pulverized to give a powder contg. I being crystal state. The powder (10 mg nicardipine) was dissolved in a buffer (pH 7.2) to show dissoln. rate 100% after 1 h, vs. 20-30% even after 8 h for untreated crystal of I.
ST nicardipine hydrochloride sustained release prepn; mannitol polymer nicardipine sustained release; enteric sol nicardipine hydrochloride prepn
IT Vinyl acetal polymers
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
((diethylamino)acetates; treatment of nicardipine hydrochloride with mannitol and polymer for enteric-sol. sustained-release prepns.)
IT Ion channel blockers
(**calcium**, treatment of nicardipine hydrochloride with mannitol and polymer for enteric-sol. sustained-release prepns.)
IT Pharmaceutical dosage forms
(sustained-release, enteric-sol.; treatment of nicardipine hydrochloride with mannitol and polymer for enteric-sol. sustained-release prepns.)
IT 69-65-8, D-Mannitol 9003-39-8, Poly(vinylpyrrolidone) 9004-32-4, **Sodium** carboxymethyl cellulose 9004-57-3, Ethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose 9010-88-2, Ethyl acrylate-methyl methacrylate copolymer 9050-31-1, Hydroxypropyl methyl cellulose phthalate 25087-26-7D, Methacrylic acid polymer, aminoalkyl derivs. 37205-99-5, Carboxymethyl ethyl cellulose 54527-84-3, Nicardipine hydrochloride 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate**
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(treatment of nicardipine hydrochloride with mannitol and polymer for enteric-sol. sustained-release prepns.)

L26 ANSWER 28 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1995:881525 HCAPLUS
DN 123:266143
TI Pharmaceutical preparation for controlled release of drugs in intestinal tract

IN Hirakawa, Yoshiyuki; Yoshino, Hiroyuki; Fukui, Eiji; Hanamori, Tami
PA Tanabe Seiyaku Co., Ltd., Japan
SO Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM A61K009-24
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 671168	A1	19950913	EP 95-103493	19950310
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	JP 07247222	A2	19950926	JP 94-40911	19940311
	CA 2144094	AA	19950912	CA 95-2144094	19950307
	US 5725880	A	19980310	US 95-402052	19950310
PRAI	JP 94-40911		19940311		

AB An oral pharmaceutical prepn. for controlled release of a drug in the intestinal tract comprises (a) a core contg. a drug and (b) a press-coated layer of enteric polymer around the core, capable of suppressing drug release until the pharmaceutical prepn. reaches intestine. Diltiazem HCl (300 g) and corn starch (200 g) were granulated; part of the granules obtained (530 g) were mixed with Ca citrate (120 g), Ca CM-cellulose (40 g), and Mg stearate (10 g) and tableted. The plain tablets prepd. were press-coated with a mixt. of hydroxypropyl Me **cellulose acetate succinate**, Ca stearate, and Mg stearate in a ratio of 8:1:1, resp., in a coating amt. of 200 mg per tablet, to obtain enteric-coated tablets.
ST drug controlled release intestine; enteric tablet drug controlled release intestine
IT Intestine
(enteric-coated compns. for drug controlled release in intestine)
IT Pharmaceutical dosage forms
(enteric-coated, controlled-release, enteric-coated compns. for drug controlled release in intestine)
IT Pharmaceutical dosage forms
(tablets, enteric-coated, enteric-coated compns. for drug controlled release in intestine)
IT 89-57-6, 5-Aminosalicylic acid 557-04-0, **Magnesium** stearate 1592-23-0, **Calcium** stearate 7693-13-2, **Calcium** citrate 9003-39-8, Polyvinylpyrrolidone 9005-25-8, Starch, biological studies 9050-04-8, **Calcium** CM-cellulose 33286-22-5, Diltiazem hydrochloride 51822-44-7, Eudragit L 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(enteric-coated compns. for drug controlled release in intestine)

L26 ANSWER 29 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1995:676429 HCAPLUS
DN 123:93155
TI Improving the oral bioavailability of sulpiride by **sodium** oleate in rabbits
AU Nassani, Imad; Kohri, Naonori; Iseki, Ken; Miyazaki, Katsumi
CS Hokkaido University Hospital, Scool of Medicine, Hokkaido University, Sapporo, 060, Japan
SO J. Pharm. Pharmacol. (1995), 47(6), 469-73

CODEN: JPPMAB; ISSN: 0022-3573
DT Journal
LA English
CC 63-6 (Pharmaceuticals)
AB To improve the limited oral bioavailability of sulpiride, a dosage form contg. **sodium** oleate as an absorption enhancer was developed and evaluated using gastric-emptying-controlled rabbits in a cross-over manner. In addn. to the known properties of **sodium** oleate with respect to modifying the permeability of biomembranes, it was found to be capable of improving the physicochem. properties of sulpiride toward a higher lipophilicity (by ion-pair assocn.) and a higher soly. (by micellar solubilization). Nonetheless, the incorporation of **sodium** oleate with sulpiride as a mixt. filled in hard gelatin capsules failed to increase intestinal absorption, whereas the use of enteric capsules, instead of the hard gelatin capsules resulted in a significant increase ($P < 0.05$) in the oral bioavailability.
ST sulpiride oral bioavailability enteric capsule oleate
IT Drug bioavailability
Intestine
Micelles
Solubilization
(enteric capsules contg. **sodium** oleate as absorption enhancer for improving oral bioavailability of sulpiride)
IT Gelatins, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(enteric capsules contg. **sodium** oleate as absorption enhancer for improving oral bioavailability of sulpiride)
IT Pharmaceutical dosage forms
(capsules, enteric-coated, enteric capsules contg. **sodium** oleate as absorption enhancer for improving oral bioavailability of sulpiride)
IT 23672-06-2, (.+-.)-Sulpiride
RL: BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(enteric capsules contg. **sodium** oleate as absorption enhancer for improving oral bioavailability of sulpiride)
IT 143-19-1, **Sodium** oleate 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(enteric capsules contg. **sodium** oleate as absorption enhancer for improving oral bioavailability of sulpiride)

L26 ANSWER 30 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1995:551240 HCAPLUS
DN 122:274133
TI Dispersion of enteric coating agent
IN Maruyama, Naosuke; Kakubo, Hiroyasu
PA Shin-Etsu Chemical Co., Ltd., Japan
SO Eur. Pat. Appl., 9 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM A61K009-36
ICS A61K009-42; A61K047-12; A61K047-14; A61K047-38
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI EP 648487 A1 19950419 EP 94-115764 19941006
R: CH, DE, FR, GB, LI
JP 07109219 A2 19950425 JP 93-252989 19931008
PRAI JP 93-252989 19931008
AB A dispersion of an enteric coating agent which can hold its uniform and stable dispersed condition over a long period of time without causing any aggregation even if is exposed to any temp. change and which has high safety as a component for prepg. pharmaceutical prepns. is herein disclosed. The dispersion comprises an enteric coating base, a plasticizer and an anionic surfactant and is characterized in that the enteric coating base having an av. particle size of .ltoreq.10 .mu.m is dispersed in water in a concn. of 5-15% on the bases of the total wt. of the dispersion and that the ratio of the enteric coating agent, the plasticizer, and the anionic surfactant is 100: (15-40): (0.1-10) parts by wt. The enteric coating base is preferably either hydroxypropyl Me cellulose phthalate or hydroxypropyl Me **cellulose acetate succinate** and the plasticizer is preferably either tri-Et citrate or triacetin.
ST enteric coating cellulose deriv base
IT Surfactants
(stable dispersion of enteric coating agent) .
IT Pharmaceutical dosage forms
(enteric-coated, stable dispersion of enteric coating agent)
IT Fatty acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**potassium** salts, stable dispersion of enteric coating agent)
IT Fatty acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**sodium** salts, stable dispersion of enteric coating agent)
IT 77-93-0, Triethyl citrate 102-76-1, Triacetin 151-21-3, **Sodium** lauryl sulfate, biological studies 9050-31-1, Hydroxypropyl methyl cellulose phthalate 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(stable dispersion of enteric coating agent)

L26 ANSWER 31 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1995:484660 HCAPLUS
DN 122:222870
TI Controlled release-initiation and controlled release-rate pharmaceutical composition containing polymers and silicones
IN Minoru, Okada; Kenji, Ono; Shuichi, Kasai; Akira, Iwasa
PA SS Pharmaceutical Co., Ltd., Japan
SO Eur. Pat. Appl., 22 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM A61K009-28
ICS A61K009-54
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 640337	A2	19950301	EP 94-113304	19940825
R: BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
JP 07061922	A2	19950307	JP 93-210453	19930825

CA 2130595	AA	19950226	CA 94-2130595	19940822
US 5496561	A	19960305	US 94-294052	19940824
CN 1109743	A	19951011	CN 94-116829	19940825

PRAI JP 93-210453 19930825

AB A controlled release-initiation and controlled release-rate pharmaceutical compn. in which a drug-contg. compn. is coated with a membrane layer comprising a water insol. high polymer and silicone is disclosed. The starting time for the release of drugs from the controlled release compn. of this invention and the drug-releasing rate thereafter can be controlled at will. A mixt. contg. chlorpheniramine maleate 100, microcryst. cellulose 490, lactose 490, and Mg stearate 10 was applied to a tablet machine to obtain uncoated tablets as central cores. Thereafter, 500 g of the above cores were put in a coating pan and sprayed with a coating soln. composed of Eudragit RS 7.5, dimethylpolysiloxane 3, anhyd. silicic acid 1.5, glycerin fatty acid ester 0.5, and EtOH 87.5% until the wt. of each tablet increased to 10mg.

ST controlled release pharmaceutical polymer silicone

IT Siloxanes and Silicones, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(controlled release-initiation and controlled release-rate pharmaceutical compn. contg. polymers and silicones)

IT Pharmaceutical dosage forms
(capsules, controlled-release, controlled release-initiation and controlled release-rate pharmaceutical compn. contg. polymers and silicones)

IT Siloxanes and Silicones, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(di-Me, controlled release-initiation and controlled release-rate pharmaceutical compn. contg. polymers and silicones)

IT Pharmaceutical dosage forms
(tablets, controlled-release, controlled release-initiation and controlled release-rate pharmaceutical compn. contg. polymers and silicones)

IT 1343-98-2, Silicic acid
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anhyd.; controlled release-initiation and controlled release-rate pharmaceutical compn. contg. polymers and silicones)

IT 58-55-9, Theophylline, biological studies 113-92-8, Chlorpheniramine maleate 154-41-6, Phenylpropanolamine hydrochloride 9003-39-8, Pvp 9004-38-0, Cellulose acetate phthalate 9004-57-3, Ethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hydroxypropylmethyl cellulose 9005-25-8, Starch, biological studies 9016-00-6, Dimethylsiloxane 9050-31-1, Hydroxypropylmethyl cellulose phthalate 15307-79-6, Diclofenac **sodium** 15421-84-8, Trapidil 25086-15-1, Methacrylic acid-methyl methacrylate copolymer 25212-88-8, Ethyl acrylate-methacrylic acid copolymer 25322-68-3, Peg 33434-24-1, Eudragit rs 37205-99-5, Carboxymethylethyl cellulose 52549-17-4, Pranoprofen 71138-97-1, Hydroxypropylmethyl **cellulose acetate succinate**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(controlled release-initiation and controlled release-rate pharmaceutical compn. contg. polymers and silicones)

IT 9004-34-6, Cellulose, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(microcrysts.; controlled release-initiation and controlled release-rate pharmaceutical compn. contg. polymers and silicones)

L26 ANSWER 32 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1995:484659 HCAPLUS
DN 122:222868
TI Sustained release pharmaceutical composition containing antiarrhythmic pyrimidinedione derivatives
IN Hyugaji, Teruo; Inage, Ikuo; Amano, Masaki; Sasaki, Masako; Iizuka, Hajime; Kobayashi, Tadashi
PA Mitsui Toatsu Chemicals, Inc., Japan
SO Eur. Pat. Appl., 18 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM A61K031-505
ICS A61K009-50
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 640341	A1	19950301	EP 94-306360	19940830
	R: DE, FR, GB				
	JP 07112932	A2	19950502	JP 94-200835	19940825
PRAI	JP 93-212458		19930827		

AB A sustained-release pharmaceutical compn. for oral administration comprises a core comprising (a) 1,3-dimethyl-6-{2-{N-(2-hydroxyethyl)-N-[3-(4-nitrophenyl) propyl]amino}ethylamino}-2,4-(1H,3H)-pyrimidinedione (I) or its acid adduct as an active component, (b) an org. acid, and (c) a water sol. polymer such as polyvinyl alc., and a coat comprising a mixt. of (d) a water insol. polymer and (e) a water sol. polymer; the components (a) to (c) being permeable together through the coat so that the active component (a) may be stably dissolved in an intestinal liq. and may not ppt. in a short period of time. Granules comprising white sugar particles 300, I 500, lactose 1500, fumaric acid 250, PVP 104 g were coated with a coating compn. contg. Eudragite RS 12.6, and PVP 2.4 g to obtain sustained-release pharmaceutical granules.

ST sustained release pharmaceutical granule pyrimidinedione deriv
IT Carboxylic acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sustained-release pharmaceutical compn. contg. antiarrhythmic pyrimidinedione derivs.)
IT Pharmaceutical dosage forms
(granules, sustained-release, sustained-release pharmaceutical compn. contg. antiarrhythmic pyrimidinedione derivs.)
IT 50-21-5, Lactic acid, biological studies 50-81-7, Ascorbic acid, biological studies 75-75-2, Methanesulfonic acid 77-92-9, Citric acid, biological studies 87-69-4, Tartaric acid, biological studies 98-11-3, Benzenesulfonic acid, biological studies 110-15-6, Succinic acid, biological studies 110-16-7, Maleic acid, biological studies 110-17-8, Fumaric acid, biological studies 124-04-9, Adipic acid, biological studies 141-82-2, Malonic acid, biological studies 144-62-7, Oxalic acid, biological studies 6915-15-7, Malic acid 7647-01-0, Hydrochloric acid, biological studies 7664-38-2, Phosphoric acid, biological studies 7664-93-9, Sulfuric acid, biological studies 7697-37-2, Nitric acid, biological studies 9002-89-5, Polyvinyl alcohol 9003-20-7, Poly(vinyl acetate) 9003-39-8, Pvp 9004-32-4, Carboxymethyl cellulose 9004-35-7, Cellulose acetate 9004-36-8, Cellulose acetate butyrate 9004-38-0, Cellulose phthalate acetate 9004-57-3, Ethyl cellulose 9004-62-0, Hydroxyethyl cellulose

9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hydroxypropylmethyl cellulose 9010-88-2, Ethyl acrylate-methyl methacrylate copolymer 9011-14-7, Poly(methyl methacrylate) 9050-04-8, **Calcium** Carboxymethyl cellulose 9050-31-1, Hydroxypropylmethyl cellulose phthalate 10035-10-6, Hydrobromic acid, biological studies 24937-78-8, Ethylene-vinyl acetate copolymer 25086-62-8, Poly(**sodium** methacrylate) 25154-86-3, Polydimethylaminoethyl methacrylate 25322-68-3, Peg 25549-84-2, Poly(**sodium** acrylate) 33434-24-1, Eudragit RS 37205-99-5, Carboxymethylethyl cellulose 71138-97-1, Hydroxypropylmethyl **cellulose acetate succinate** 130636-43-0
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sustained-release pharmaceutical compn. contg. antiarrhythmic pyrimidinedione derivs.)

L26 ANSWER 33 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1995:401344 HCAPLUS
DN 122:170234
TI Oral pharmaceutical formulations containing **magnesium** salt of omeprazole
IN Bengtsson, Inga Siv; Loevgren, Kurt Ingmar
PA Astra Aktiebolag, Swed.
SO PCT Int. Appl., 24 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K009-24
ICS A61K009-52; A61K031-44
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9501783	A1	19950119	WO 94-SE681	19940708
	W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN				
	RW: KE, MW, SD, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	ZA 9404934	A	19950220	ZA 94-4934	19940707
	CA 2166483	AA	19950119	CA 94-2166483	19940708
	CA 2166483	C	19970916		
	AU 9471982	A1	19950206	AU 94-71982	19940708
	AU 681686	B2	19970904		
	EP 706378	A1	19960417	EP 94-921155	19940708
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	CN 1126946	A	19960717	CN 94-192734	19940708
	BR 9406941	A	19960910	BR 94-6941	19940708
	JP 08512316	T2	19961224	JP 94-504006	19940708
	HU 75306	A2	19970528	HU 95-3874	19940708
	US 5690960	A	19971125	US 94-313036	19940927
	NO 9600067	A	19960105	NO 96-67	19960105
	FI 9600102	A	19960109	FI 96-102	19960109
PRAI	SE 93-2395	19930709			
	WO 94-SE681	19940708			

AB A new oral pharmaceutical formulation contg. a novel phys. form of a **magnesium** salt of omeprazole, and a method for the manuf. of

such a formulation is disclosed. A tablet contained Mg omeprazole 11.2, mannitol 68.7, microcryst. cellulose 25.0, **Na** starch glycolate 6.0, HPMC 6.0, talc 5.0, **Na** stearyl fumarate 2.5, and water 50.0 mg in the core; HPMC 3.7, 30% H2O2 0.04, and water 34 mg in the sub-coating layer; methacrylic acid copolymer 9.1, PEG 1.0, TiO2 0.82, iron oxide red-brown 0.04, iron oxide yellow 0.02, and water 45.0 mg in the enteric coating layer; and paraffin powder 0.05 mg in the polish.

ST oral pharmaceutical **magnesium** omeprazole; tablet **magnesium** omeprazole

IT Ulcer inhibitors
(oral pharmaceutical formulations contg. **magnesium** omeprazole)

IT Pharmaceutical dosage forms
(pellets, enteric-coated, oral pharmaceutical formulations contg. **magnesium** omeprazole)

IT Pharmaceutical dosage forms
(tablets, enteric-coated, oral pharmaceutical formulations contg. **magnesium** omeprazole)

IT 79-41-4D, Methacrylic acid, polymers 9004-38-0, Cellulose acetate phthalate 9004-65-3, Hydroxypropyl methyl cellulose 9050-31-1, Hydroxypropyl methyl cellulose phthalate 52907-01-4, Cellulose acetate trimellitate 53237-50-6 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate**
95382-33-5, Omeprazole **Magnesium**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oral pharmaceutical formulations contg. **magnesium** omeprazole)

L26 ANSWER 34 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1995:300313 HCAPLUS
DN 122:89441
TI Manufacture of aqueous enteric-soluble emulsions containing hydroxypropyl methyl **cellulose acetate succinate** and surfactants
IN Kokubo, Hiroyasu
PA Shinetsu Chem Ind Co, Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM A61K009-107
ICS A61K047-38
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06293633	A2	19941021	JP 93-77931	19930405

AB Aq. enteric-sol. emulsions are manufd. by addn. of AcOEt soln. contg. hydroxypropyl Me **cellulose acetate succinate** (I) to an aq. soln. contg. surfactants, emulsification of the mixts. for .gtoreq.2 times at pressure .gtoreq.200 kg/cm2 using high-pressure homogenizers, and removal of AcOEt from the compns. The emulsions show good stability and are useful for aq. enteric coating. I 100 g was dissolved in 500 g AcOEt, the soln. was put in a soln. contg. 1400 g water and 3 g **Na** lauryl sulfate, the mixt. was emulsified with high-pressure homogenizers, and the emulsified liq. was distd. to give an emulsion (av. particle size 0.3 .mu.m). A film prepn.

formed by casting a mixt. of the emulsion and tri-Et citrate on a glass plate, did not disintegrate in an aq. soln. of pH 1.2.
ST enteric coating emulsion cellulose ether ester; surfactant enteric sol cellulose ester
IT Emulsifying agents
(manuf. of enteric-sol. emulsions contg. hydroxypropyl Me **cellulose acetate succinate** and surfactants)
IT Pharmaceutical dosage forms
(enteric-coated, manuf. of enteric-sol. emulsions contg. hydroxypropyl Me **cellulose acetate succinate** and surfactants)
IT 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(AS-MG; manuf. of enteric-sol. emulsions contg. hydroxypropyl Me **cellulose acetate succinate** and surfactants)
IT 141-78-6, Ethyl acetate, uses
RL: NUU (Nonbiological use, unclassified); REM (Removal or disposal); PROC (Process); USES (Uses)
(manuf. of enteric-sol. emulsions contg. hydroxypropyl Me **cellulose acetate succinate** and surfactants)
IT 151-21-3, **Sodium** lauryl sulfate, biological studies
9005-65-6, Polysorbate 80
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(manuf. of enteric-sol. emulsions contg. hydroxypropyl Me **cellulose acetate succinate** and surfactants)

L26 ANSWER 35 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1995:261256 HCAPLUS
DN 122:38876
TI Controlled-release pH-sensitive capsule and adhesive system and method
IN Lew, Chel W.
PA Southwest Research Institute, USA
SO U.S., 4 pp.
CODEN: USXXAM
DT Patent
LA English
IC ICM A61K009-48
NCL 424451000
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5364634	A	19941115	US 91-790639	19911108

AB A capsule for bioadhesion in the oral cavity comprises at least one internal active ingredient, a pH-sensitive shell, and an adhesive system. The pH sensitive shell dissolves at a pH in the oral cavity while the adhesive allows dissoln. at the selected tissue. Benzocaine 20.0, oil 5.0, flavor oil 0.5, and sorbic acid 0.1 (as active ingredients) were encapsulated with a gel base of pectin, gelatin, CMC, and water 72.4 and polyethylene glycol 1.0 (outer shell and adhesive).
ST controlled release capsule microcapsule mouth bioadhesion
IT Gums and Mucilages

Mouth
(controlled-release pH-sensitive capsule for mouth bioadhesion)
IT Acrylic polymers, biological studies
Gelatins, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(controlled-release pH-sensitive capsule for mouth bioadhesion)
IT Lipids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inner coating; controlled-release pH-sensitive capsule for mouth bioadhesion)
IT Adhesion
(bio-, controlled-release pH-sensitive capsule for mouth bioadhesion)
IT Pharmaceutical dosage forms
(capsules, controlled-release, controlled-release pH-sensitive capsule for mouth bioadhesion)
IT Encapsulation
(micro-, controlled-release pH-sensitive capsule for mouth bioadhesion)
IT Pharmaceutical dosage forms
(microcapsules, controlled-release, controlled-release pH-sensitive capsule for mouth bioadhesion)
IT 9000-30-0, Guar gum 9000-65-1, Gum tragacanth 9000-69-5, Pectin 9002-88-4 9003-01-4, Polyacrylic acid 9004-32-4 9004-38-0, Cellulose acetate phthalate 9004-65-3, Hydroxypropyl methyl cellulose 9005-25-8, Starch, biological studies 9005-38-3, Algin 9012-76-4, Chitosan 9050-31-1, Hydroxypropyl methyl cellulose phthalate 25322-68-3 52907-01-4, Cellulose acetate trimellitate 53237-50-6 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate** 126040-58-2, **Calcium** polycarbophil
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(controlled-release pH-sensitive capsule for mouth bioadhesion)

L26 ANSWER 36 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1994:485618 HCAPLUS
DN 121:85618
TI Porous acrylic fiber blend yarns for towels
IN Mizukami, Yoshikatsu; Tsuda, Yukio; Fukumoto, Yoko; Kakegawa, Satoko
PA Kanebo Ltd, Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM D02G003-04
ICS D01F006-38; D01F006-54; D02G003-44; D03D015-00
CC 40-2 (Textiles and Fibers)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06081237	A2	19940322	JP 92-269239	19920911

PRAI JP 92-213326 19920717
AB The yarns comprise 30-70% porous fibers spun from mixts. comprising 80-95% polymers contg. .gtoreq.94% acrylonitrile units and .gtoreq.3% units of sulfonic acid salt group-contg. compds. and 20-5% cellulose acetate (I) and having water absorption .gtoreq.18%, and .gtoreq.30% cotton fibers. A 90:10 blend of 95.8:1.1:3.1 acrylonitrile-Me acrylate-**sodium** 2-acrylamido-2-methylpropanesulfonate copolymer and I was wet spun, drawn, washed,

dried, heat set 3 min at 130.degree., drawn, and crimped to give porous fibers with water absorption 25%, tenacity 2.8 g/denier, and elongation 36%. A 50:50 blend of this fiber and cotton was mech. spun and made into a towel showing good hygroscopicity and smoothness.

ST porous acrylic fiber cotton blend towel; hygroscopic acrylic fiber cotton blend towel; **cellulose acetate** **acrylic** fiber hygroscopic porous

IT Acetate fibers, preparation
RL: PREP (Preparation)
(biconstituent with acrylic fibers, porous, hygroscopic, blends with cotton, for towels)

IT Acrylic fibers, preparation
RL: PREP (Preparation)
(biconstituent with cellulose acetate fibers, porous, hygroscopic, blends with cotton, for towels)

IT Household furnishings
(towels, blends of porous hygroscopic acrylic fibers and cotton for)

IT 9004-35-7, Cellulose acetate
RL: USES (Uses)
(fiber, biconstituent with acrylonitrile copolymers, porous, hygroscopic, for towels)

IT 27103-76-0, Acrylonitrile-**sodium** methallylsulfonate copolymer 51555-38-5, Acrylonitrile-**sodium** 2-acrylamido-2-methylpropanesulfonate copolymer 70765-57-0, Acrylonitrile-methyl acrylate-**sodium** 2-acrylamido-2-methylpropanesulfonate copolymer 125221-40-1, Acrylonitrile-**sodium** 2-acrylamido-2-methylpropanesulfonate-vinyl acetate copolymer
RL: USES (Uses)
(fiber, biconstituent with cellulose acetate, porous, hygroscopic, for towels)

L26 ANSWER 37 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1994:247308 HCAPLUS
DN 120:247308
TI Hygroscopic acrylic conjugate fibers
IN Sasaki, Minoru; Oono, Masahito
PA Kanebo Ltd, Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM D01F008-08
ICS D03D015-00
CC 40-2 (Textiles and Fibers)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 05302213	A2	19931116	JP 92-129598	19920421

AB The fibers consist of a component (A) comprising 50-98% acrylic polymers (A1) and 2-50% polymers miscible with A1 but not compatible with A1 sandwiched between 2 components comprising acrylic polymers and have the surface contg. .gtoreq.2 portions of A component oriented in the direction of the fiber axis. The fibers are useful for bedding stuffings, sportswear, blankets, and interior materials (no data). A 23% soln. contg. 92 parts (91:7:2) = acrylonitrile-Me acrylate-**sodium** 2-acrylamido-2-methylpropanesulfonate

copolymer and 8 parts cellulose acetate and a 23% soln. of (91:7:2) acrylonitrile-Me acrylate-**sodium** 2-acrylamidepropanesulfonate copolymer were together wet spun at 20:80 wt. ratio and drawn to give fibers showing tenacity 4.2 g/d, elongation 37.5%, and good hygroscopicity and dyeing yield.

ST hygroscopic acrylic conjugate fiber manufg; bedding stuffing hygroscopic acrylic fiber; sportswear hygroscopic acrylic fiber; blanket hygroscopic acrylic fiber; **cellulose acetate acrylic** fiber hygroscopic

IT Acrylic fibers, preparation
RL: PREP (Preparation)
(bicomponent, hygroscopic, manuf. of)

IT Wettability
(of acrylic fibers, improvement of, by cellulose acetate)

IT 9004-35-7P, Cellulose acetate
RL: PREP (Preparation)
(blends with acrylic polymers, fiber, bicomponent with acrylic polymers, hygroscopic, manuf. of)

IT 108501-74-2P
RL: PREP (Preparation)
(blends with cellulose acetate, fiber, bicomponent with acrylic polymers, hygroscopic, manuf. of)

IT 154601-34-0P
RL: PREP (Preparation)
(fiber, bicomponent with acrylic polymer-cellulose acetate blends, hygroscopic, manuf. of)

IT 7732-18-5
RL: USES (Uses)
(wettability, of acrylic fibers, improvement of, by cellulose acetate)

L26 ANSWER 38 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1994:220675 HCAPLUS
DN 120:220675
TI Manufacture of esters of polycarboxylic acids and cellulose derivatives
IN Kokubo, Hiroyasu; Nagasaki, Yoshio; Maruyama, Kazumasa; Muto, Yasuaki
PA Shinetsu Chem Ind Co, Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C08B003-12
CC 43-3 (Cellulose, Lignin, Paper, and Other Wood Products)
Section cross-reference(s): 63, 74

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 05339301	A2	19931221	JP 92-145846	19920605

AB The title esters, useful for coating and encapsulating drugs or on photog. paper (no data), are prepd. by esterification in AcOH with a carboxylic acid salt as a catalyst. Heating hydroxypropyl Me cellulose 400, phthalic anhydride 302, AcOH 520, and AcONa 170 g at 85.degree. for 3 h gave an ester (63% yield).

ST cellulose ether esterification polycarboxylic acid; phthalic anhydride esterification cellulose ether; phthalate hydroxymethyl methyl cellulose prepn; acetate **sodium** catalyst esterification cellulose ether

IT Esterification catalysts
(**sodium** acetate, for cellulose ethers and polybasic carboxylic acids)
IT 127-09-3, **Sodium** acetate
RL: CAT (Catalyst use); USES (Uses)
(catalysts, for esterification of cellulose ethers with polybasic carboxylic acids)
IT 85-44-9, Phthalic anhydride
RL: RCT (Reactant)
(esterification by, of cellulose ethers, catalysts for)
IT 108-30-5, Succinic anhydride, reactions
RL: RCT (Reactant)
(esterification of, with cellulose ethers, catalysts for)
IT 9050-31-1P, Hydroxypropyl methyl cellulose phthalate 71138-97-1P, Hydroxypropyl methyl **cellulose acetate succinate**
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of, esterification catalysts for)
IT 64-19-7, Acetic acid, uses
RL: USES (Uses)
(solvents, for esterification of cellulose ethers with polycarboxylic acids)

L26 ANSWER 39 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1994:144210 HCAPLUS
DN 120:144210
TI Topical pharmaceutical suspensions containing particulates of water soluble polymers
IN Morita, Yasushi; Kimura, Masako
PA Senju Pharmaceutical Co., Ltd., Japan
SO Eur. Pat. Appl., 7 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM A61K009-10
ICS A61K047-32; A61K047-38
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 582259	A2	19940209	EP 93-112372	19930802
	EP 582259	A3	19941005		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	CA 2101126	AA	19940204	CA 93-2101126	19930722
	JP 06100436	A2	19940412	JP 93-187757	19930729
PRAI	JP 92-206640		19920803		

AB Aq. topical pharmaceutical suspensions with improved bioavailability contain suspension of .gtoreq.1 particulates of water sol. polymers, which will dissolve or gel at a pH within the pH range of secreted fluid at a local site of the body to which said prepn. is applied, and a drug applicable to said local site. An eye drop contained fluorometholone (I) 0.1, hydroxypropylmethyl **cellulose acetate succinate** 1.0, NaH2POH3 0.1, NaCl 0.9, Polysorbaye 80 0.2, benzalkonium chloride 0.0005g, and water q.s. 100mL. The concn. of I in 1mg conjunctival tissue of rabbit eyes was retained at 0.184 ng up to 16 h after instillation and its AUC was 1.7 times as much as that of the control.
ST topical pharmaceutical suspension particulate polymer;

fluorometholone **cellulose acetate succinate** eye drop
IT Acrylic polymers, biological studies
RL: BIOL (Biological study)
(topical pharmaceutical suspensions contg.)
IT Polymers, biological studies
RL: BIOL (Biological study)
(water sol., topical pharmaceutical suspensions contg.)
IT Carboxylic acids, biological studies
RL: BIOL (Biological study)
(di-, topical pharmaceutical suspensions contg.)
IT Pharmaceutical dosage forms
(solns., ear, particulates of water sol. polymers in)
IT Pharmaceutical dosage forms
(suspensions, nasal, particulates of water sol. polymers in)
IT Pharmaceutical dosage forms
(suspensions, ophthalmic, particulates of water sol. polymers in)
IT Pharmaceutical dosage forms
(suspensions, topical, particulates of water sol. polymers in)
IT 79-10-7D, Acrylic acid, esters, copolymers with methacrylic acid 79-41-4D, Methacrylic acid, copolymers with acrylic acid esters 9050-31-1, Hydroxypropylmethyl cellulose phthalate 51822-44-7, Eudragit L 71138-97-1, Hydroxypropylmethyl **cellulose acetate succinate**
RL: BIOL (Biological study)
(topical pharmaceutical suspensions contg.)
IT 426-13-1, Fluorometholone 15826-37-6, **Sodium** cromoglycate 25389-94-0, Kanamycin sulfate
RL: BIOL (Biological study)
(topical pharmaceutical suspensions contg. particulates of water sol. polymers and)

L26 ANSWER 40 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1994:62282 HCAPLUS
DN 120:62282
TI Oral pharmaceutical preparations containing salts of dichloromethylene bisphosphonic acid
IN Posti, Juhani; Katila, Kirsi; Rantala, Pertti
PA Leiras Oy, Finland
SO PCT Int. Appl., 11 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K009-30
ICS A61K031-66
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9321907	A1	19931111	WO 93-FI166	19930421
W: AU, CA, CZ, FI, HU, JP, NO, NZ, PL, RU, SK, UA, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
SE 9201299	A	19931025	SE 92-1299	19920424
SE 501389	C2	19950130		
IL 105403	A1	19980310	IL 93-105403	19930415
AU 9339550	A1	19931129	AU 93-39550	19930421
AU 671830	B2	19960912		
EP 637236	A1	19950208	EP 93-908973	19930421

EP 637236 B1 19961009
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
JP 07505898 T2 19950629 JP 93-518958 19930421
AT 143802 E 19961015 AT 93-908973 19930421
ES 2094539 T3 19970116 ES 93-908973 19930421
HU 74572 A2 19970128 HU 94-3067 19930421
CZ 282871 B6 19971112 CZ 94-2614 19930421
FI 9404961 A 19941021 FI 94-4961 19941021
NO 9404001 A 19941021 NO 94-4001 19941021
US 5525354 A 19960611 US 94-318650 19941212
PRAI SE 92-1299 19920424
WO 93-FI166 19930421

AB Oral pharmaceutical prepns. contg. salts of dichloromethylene bisphosphonic acid (I) are disclosed. The prepns. are enteric coated with a film which dissolves at a pH=5-7.2. A tablet core contg. Na2I 800.00, polyvidone 30.00, croscarmellose **Na** 29.40, microcryst. cellulose 38.70, lactose 119.91, stearic acid 18.75, SiO2 20.00, talc 34.00, and Mg stearate 9.24mg was coated with a coating soln. contg. hydroxypropl Me cellulose phthalate 52.00, diethylpthalate 7.80, EtOH 516.60, and water 135.70mg. The AUC0-24h for the enteric-coated tablets was 2478.60 as compared to 1195.06 for the ordinary tablets.

ST dichloromethylene bisphosphonate enteric coated tablet
IT Drug bioavailability
(of dichloromethylene bisphosphonate, from oral prepns.)
IT Pharmaceutical dosage forms
(capsules, dichloromethylene bisphosphonate in)
IT Pharmaceutical dosage forms
(granules, dichloromethylene bisphosphonate in)
IT Pharmaceutical dosage forms
(pellets, dichloromethylene bisphosphonate in)
IT Pharmaceutical dosage forms
(sachets, dichloromethylene bisphosphonate in)
IT Pharmaceutical dosage forms
(tablets, dichloromethylene bisphosphonate in)
IT Pharmaceutical dosage forms
(tablets, enteric-coated, dichloromethylene bisphosphonate in)
IT 10596-23-3D, Dichloromethylene bisphosphonic acid, salts
22560-50-5
RL: BIOL (Biological study)
(oral pharmaceuticals contg.)
IT 79-41-4D, Methacrylic acid, derivs. 9004-38-0, Cellulose acetate phthalate 9050-31-1, Hydroxypropyl methyl cellulose phthalate 52907-01-4, Cellulose acetate trimellitate 53237-50-6, Polyvinyl acetate phthalate 71138-97-1, Hydroxypropyl methyl
cellulose acetate succinate
RL: BIOL (Biological study)
(oral pharmaceuticals contg. dichloromethylene bisphosphonate and)

=> d l26 all 41-60

L26 ANSWER 41 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1993:634039 HCAPLUS
DN 119:234039
TI Stabilized oral preparations containing ulcer inhibitors
IN Ooishi, Naohiro; Shibata, Toshuki; Ikeda, Kuniki
PA Yoshitomi Pharmaceutical, Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM A61K031-44
ICS A61K009-20; A61K047-18
ICI A61K031-44, A61K031-195
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 05194225	A2	19930803	JP 92-322466	19921105
PRAI JP 91-321230		19911107		

AB Acid-labile benzimidazole ulcer inhibitors are stabilized by compounding with amino acids and buffering agents and formulated into tablets, granules, and capsules. For example, a granular prepn. contained omeprazole 5.0, glycine 2.5, Na2HPO4.cntdot.12H2O 2.5, cryst. cellulose 4.0, hydroxypropyl cellulose 4.5, and mannitol 56.5 mg.

ST antiulcer benzimidazole amino acid stabilizer
IT Buffer substances and systems
(antiulcer benzimidazole oral formulations contg. amino acid stabilizers and)
IT Amino acids, biological studies
RL: BIOL (Biological study)
(benzimidazole antiulcer agent stabilization with, in oral formulations)
IT Ulcer inhibitors
(benzimidazoles, oral prepns. contg. amino acid stabilizers and)
IT Pharmaceutical dosage forms
(capsules, of antiulcer benzimidazoles, amino acid stabilizers and buffering agents in)
IT Pharmaceutical dosage forms
(granules, of antiulcer benzimidazoles, amino acid stabilizers and buffering agents in)
IT Amino acids, compounds
RL: BIOL (Biological study)
(salts, benzimidazole antiulcer agent stabilization with, in oral formulations)
IT Polyphosphoric acids
RL: BIOL (Biological study)
(**sodium** salts, buffering agents, in stabilized antiulcer benzimidazole oral formulations)
IT Pharmaceutical dosage forms
(tablets, of antiulcer benzimidazoles, amino acid stabilizers and buffering agents in)
IT 73590-58-6, Omeprazole 103577-45-3, Lansoprazole 117976-90-6
RL: BIOL (Biological study)
(antiulcer oral prepns. contg. amino acid stabilizer and)

IT 56-40-6, Glycine, biological studies 56-41-7, Alanine, biological studies 56-84-8, Asparaginic acid, biological studies 56-86-0, Glutamic acid, biological studies 56-87-1, Lysine, biological studies 63-91-2, Phenylalanine, biological studies 72-18-4, Valine, biological studies 72-19-5, Threonine, biological studies 73-32-5, Isoleucine, biological studies 80-68-2, DL-Threonine 138-15-8 302-72-7, DL-Alanine 5408-52-6 6000-43-7 16079-51-9 16177-21-2, Glutamic acid **sodium** salt
RL: BIOL (Biological study)
(benzimidazole antiulcer agent stabilization with, in oral formulations)

IT 127-09-3, **Sodium** acetate 144-55-8, **Sodium** hydrogen carbonate, biological studies 471-34-1, **Calcium** carbonate, biological studies 497-19-8, **Sodium** carbonate, biological studies 546-93-0, **Magnesium** carbonate 1309-42-8, **Magnesium** hydroxide 1309-48-4, **Magnesium** oxide, biological studies 1343-88-0, **Magnesium** silicate 7558-79-4, Disodium hydrogen phosphate 7601-54-9, Trisodium phosphate 7664-38-2D, Phosphoric acid, **alkali metal** salts 7722-88-5 7758-11-4, Dipotassium hydrogen phosphate 7778-53-2, Tripotassium phosphate 12304-65-3, Hydrotalcite 13682-92-3 14475-11-7 21645-51-2, Aluminum hydroxide, biological studies 50813-16-6, **Sodium** metaphosphate
RL: BIOL (Biological study)
(buffering agent, in stabilized antiulcer benzimidazole oral formulations)

IT 9004-38-0, Cellulose acetate phthalate 9050-31-1, Hydroxypropyl methyl cellulose phthalate 25751-21-7, Acrylic acid-methacrylic acid copolymer 37205-99-5, Carboxymethyl ethyl cellulose 53237-50-6 144113-37-1, Hydroxymethyl **cellulose acetate succinate**
RL: BIOL (Biological study)
(enteric coating agent, in stabilized antiulcer benzimidazole oral formulations)

L26 ANSWER 42 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1992:533199 HCAPLUS
DN 117:133199
TI Manufacture of mixed cellulose ether
IN Koshkin, M. P.; Pavlenko, G. L.; Gorodnov, V. D.
PA Moscow Institute of the Petrochemical and Gas Industry, USSR
SO U.S.S.R.
From: Otkrytiya, Izobret. 1991, (34), 91.
CODEN: URXXAF
DT Patent
LA Russian
IC ICM C08B011-193
CC 43-3 (Cellulose, Lignin, Paper, and Other Wood Products)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 1677041	A1	19910915	SU 88-4603270	19881109

AB Mixed cellulose (I) ether, having improved rheol. properties, is manufd. by reacting I with alkali, **Na** mesodibromosuccinate, and ClCH2CO2Na in 1:2.6:0.25-0.75:0.5-1.5 ratio in EtOH or H2O at 70.degree. for 1 h, followed by recovery of I ether.
ST ether mixed cellulose manuf; alkylation alkali cellulose;

chloroacetate **sodium** alkylation cellulose;
mesodibromosuccinate **sodium** alkylation cellulose
IT Alkylation
(of alkali cellulose, with **sodium** monochloroacetate and mesodibromosuccinate)
IT 3926-62-3, **Sodium** monochloroacetate 143458-81-5
RL: RCT (Reactant)
(alkylation by, of alkali cellulose)
IT 9081-58-7
RL: USES (Uses)
(manuf. of mixed ether from)
IT 9032-35-3P, **Cellulose acetate succinate**
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of, with improved rheol., method for)

L26 ANSWER 43 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1992:455995 HCAPLUS
DN 117:55995
TI Antiacid compositions with lengthened residence time in the stomach
IN Fritsch, Christian; Haeusler, Franz; Seedig, Juergen
PA Bayer A.-G., Germany
SO Ger. Offen., 7 pp.
CODEN: GWXXBX
DT Patent
LA German
IC ICM A61K009-20
ICS A61K009-16
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4036757	A1	19920521	DE 90-4036757	19901117
	EP 486863	A1	19920527	EP 91-118732	19911104
	EP 486863	B1	19950830		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	ES 2077766	T3	19951201	ES 91-118732	19911104
	JP 04290816	A2	19921015	JP 91-324022	19911113
	US 5213794	A	19930525	US 91-791944	19911113
	CA 2055536	AA	19920518	CA 91-2055536	19911114
PRAI	DE 90-4036757		19901117		

AB Ca polycarbophil lengthens the residence time of antacids in the stomach. The compns. also contain water-insol. anionic polymers. Antacid tablets contained magaldrate 800, cellulose acetate phthalate 180, vinylpyrrolidone)-vinyl acetate copolymer 30, triacetin 40, Ca polycarbophil 800, **Na** CM-cellulose 200, silica 30, xylitol 300, saccharin **Na** 5, peppermint flavor 5, and Mg stearate 10 mg.
ST antacid long acting **calcium** polycarbophil
IT Shellac
RL: BIOL (Biological study)
(antacid compn. contg., long-acting)
IT Polyelectrolytes
(anionic, water-insol., antacid compns. contg., long-acting)
IT Antacids and Antiflatulents
(sustained-release, **calcium** polycarbophil-contg.)
IT 79-10-7D, 2-Propenoic acid, polymers with methacrylates 79-41-4D, derivs., polymers with acrylic acid 7429-90-5D, Aluminum, compds. 7439-95-4D, **Magnesium**, compns. 9003-97-8, **Calcium** polycarbophil 9004-38-0, Cellulose acetate

phthalate 9032-35-3, **Cellulose acetate succinate** 9050-31-1, Hydroxypropylmethylcellulose phthalate 12304-65-3, Hydrotalcite 66827-12-1 74978-16-8, Magaldrate 142582-87-4
RL: BIOL (Biological study)
(antacid compn. contg., long-acting)

L26 ANSWER 44 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1992:436543 HCAPLUS
DN 117:36543
TI Transparent receptor for electrophotographic toner image for production of transparency
IN Malhotra, Shadi L.
PA Xerox Corp., USA
SO Eur. Pat. Appl., 22 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM G03G007-00
ICS B41M005-00
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 463400	A1	19920102	EP 91-109012	19910603
	EP 463400	B1	19970402		
	R: DE, FR, GB				
	US 5202205	A	19930413	US 90-544577	19900627
	CA 2041911	AA	19911228	CA 91-2041911	19910507
	JP 04232773	A2	19920821	JP 91-148811	19910620
PRAI	US 90-544577		19900627		

AB The title receptor is obtained by coating a transparent substrate, on both sides, with an adhesive layer and overcoating each adhesive layer with an antistatic layer comprising metal halides or urea compds. and polymers contg. oxyalkylene segments. An electrophotog. toner image of high optical d. is readily transferred to the receptor and can not be hand wiped or lifted with a scotch tape.
ST electrophotog image receptor transparency prodn; antistatic electrophotog image receptor polyoxyalkylene; adhesive electrophotog image receptor transparency
IT Projection slides
(electrophotog. transparent image receptors contg. adhesive and antistatic coatings for prodn. of)
IT Polyoxymethylenes, uses
RL: USES (Uses)
(electrophotog. transparent image receptors contg., for prodn. of transparencies)
IT Electrography
(transparent image receptors contg. adhesive and antistatic coatings for, for transparency prodn.)
IT Audio-visual aids
(projection slides, electrophotog. transparent image receptors contg. adhesive and antistatic coatings for prodn. of)
IT 57-13-6, Urea, uses 62-56-6, Thiourea, uses 471-34-1, Carbonic acid **calcium** salt (1:1), uses 506-89-8, Urea monohydrochloride 4401-74-5, Urea phosphate 7487-94-7, Mercuric chloride, uses 7550-35-8, **Lithium** bromide 7631-86-9, Silica, uses 7646-85-7, Zinc chloride (ZnCl2), uses 7681-11-0,

Potassium iodide (KI), uses 7681-82-5, **Sodium** iodide (NaI), uses 7786-30-3, **Magnesium** chloride (MgCl2), uses 9002-86-2, Poly(vinyl chloride) 9002-88-4, Polyethylene 9002-88-4D, Polyethylene, chlorinated 9002-88-4D, Polyethylene, chlorosulfonated 9003-07-0, Poly(propylene) 9003-07-0D, Polypropylene, chlorinated 9003-11-6 9003-28-5, Poly(1-butene) 9003-31-0D, Polyisoprene, chlorinated 9003-53-6 9003-63-8, Poly(butyl methacrylate) 9004-36-8, Cellulose acetate butyrate 9004-38-0, Cellulose acetate hydrogen phthalate 9004-48-2, Cellulose propionate 9004-57-3, Ethyl cellulose 9004-58-4, Ethylhydroxy ethyl cellulose 9004-65-3, Hydroxypropylmethylcellulose 9004-74-4, Poly(ethylene glycol monomethyl ether) 9010-86-0, Ethylene-ethyl acrylate copolymer 9011-12-5 9011-13-6 9011-15-8, Poly(isobutyl methacrylate) 9011-53-4, Butyl methacrylate-isobutyl methacrylate copolymer 9016-45-9, Nonylphenol ethoxylate 9036-19-5, Octylphenol ethoxylate 9041-56-9, Hydroxybutyl methyl cellulose 9050-31-1, Hydroxypropyl methyl cellulose phthalate 10108-64-2, Cadmium chloride 13463-67-7, Titanium oxide (TiO2), uses 19082-42-9, Urea sulfate 24936-41-2, Poly(p-methyl styrene) 24936-44-5, Poly(p-methoxy styrene) 24936-50-3, Poly(p-bromostyrene) 24937-05-1, Poly(ethylene adipate) 24937-78-8 24938-37-2 24969-06-0, Poly(epichlorohydrin) 24981-14-4, Poly(vinyl fluoride) 24991-47-7, Poly(p-chlorostyrene) 24991-55-7, Poly(ethylene glycol dimethyl ether) 25014-31-7, Poly(.alpha.-methyl styrene) 25038-32-8 25038-59-9, uses 25053-15-0, Poly(diallyl phthalate) 25068-12-6 25086-89-9 25190-06-1 25213-24-5, Vinyl alcohol-vinyl acetate copolymer 25232-41-1, Poly(4-vinyl pyridine) 25249-16-5, Poly(2-hydroxyethyl methacrylate) 25267-79-2, Ethylene oxide-styrene copolymer 25322-68-3 25322-69-4, Poly(propylene oxide) 25569-53-3 25609-73-8 25667-11-2, Poly(ethylene succinate) 25703-79-1, Poly(2-hydroxypropyl methacrylate) 25852-49-7, Poly(propylene glycol dimethacrylate) 26009-55-2, Poly(p-tert-butyl styrene) 26403-72-5, Poly(ethylene glycol diglycidyl ether) 26570-48-9, Poly(ethylene glycol diacrylate) 27576-79-0, Poly(p-isopropyl-.alpha.-methyl styrene) 29791-79-5, Ethylene oxide-isoprene copolymer 30174-06-2 30872-09-4, Poly(p-isopropyl styrene) 42556-95-6 57271-36-0 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate** 76796-25-3 142175-30-2 142175-31-3 142175-32-4
RL: USES (Uses)
(electrophotog. transparent image receptors contg., for prodn. of transparencies)

L26 ANSWER 45 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1992:433734 HCAPLUS
DN 117:33734
TI Nicotine-containing patches for applying oral mucous membrane
IN Yamada, Akiya; Wato, Takahiko; Konishi, Tatsuya; Mizobuchi, Tadafumi
PA Teikoku Seiyaku Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM A61K031-465
ICS A61K009-70
CC 63-7 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03209326	A2	19910912	JP 90-4037	19900111

AB Patches for applying oral mucous membrane are composed of (i) adhesive film and (ii) pharmaceutical reservoir film contg. nicotine on the adhesive film. Jurymer EN 05 (water-insol. polymer) 10.0, hydroxypropyl Me **cellulose acetate succinate** 10.0, nicotine 6.0, lactic acid 6.0, tri-Et citrate 2.0, H2O 20.0, and EtOH 45.0 g were mixed and spread on a release paper to give a pharmaceutical transdermal film (100 .mu.m thickness). Jurymer EN-05 10.0, poly(vinyl alc.) 20.0, Jurymer SH-8 (water-insol. polymer) 5.0, butanediol 10.0, TiO2 1.0, H2O 80.0, and EtOH 74.0 g were mixed and spread on a removal paper to give an adhesive film (100 .mu.m thickness). The pharmaceutical film and the adhesive film were laminated and cut to give oval-shaped patches (size 1.9 cm2), which showed nicotine elution rate of 80.4, 92.4, and 98.6% after 30, 60, and 120 min, resp., and good storage stability.

ST nicotine patch oral mucous membrane

IT Shellac
RL: BIOL (Biological study)
(patches contg. nicotine and, for oral mucous membrane, with good storage stability)

IT Pharmaceutical dosage forms
(transdermal, contg. nicotine, for oral mucous membrane, with good storage stability)

IT 9002-89-5, Poly(vinyl alcohol) 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate**
138789-55-6, Jurymer EN 05 138789-56-7, Jurymer SH 8
RL: BIOL (Biological study)
(patches contg. nicotine and, for oral mucous membrane)

IT 9003-39-8, PVP-**K** 30
RL: BIOL (Biological study)
(patches contg. nicotine and, for oral mucous membrane, with good storage stability)

IT 54-11-5, Nicotine
RL: BIOL (Biological study)
(patches contg., for oral mucous membrane, stable)

L26 ANSWER 46 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1992:410065 HCAPLUS
DN 117:10065
TI Comparison of cellulose formate and cellulose acetate under homogeneous reaction conditions
AU Philipp, Burkhart; Wagenknecht, Wolfgang; Nehls, Irene; Ludwig, Juergen; Schnabelrauch, Matthias; Kim, Ho Rim; Klemm, Dieter
CS Inst. Polymerenchem. "Erich Correns", Teltow Seehof, Germany
SO Cellul. Chem. Technol. (1990), 24(6), 667-78
CODEN: CECTAH; ISSN: 0576-9787
DT Journal
LA German
CC 43-3 (Cellulose, Lignin, Paper, and Other Wood Products)

AB Results of the synthesis of DMF-sol. cellulose formates and their homogeneous sulfation with SO3 and SO3HCl were compared with those of the sulfation of cellulose acetate (DS = 2.5) in DMF. Water-sol. **Na** cellulose sulfates were obtained at DSs > 0.5 in the case of the formate and > 0.2 in the case of the acetate; the difference was caused by a different substituent distribution along and between the polymer chain. Sulfation of cellulose acetate (DS = 2.5)

proceeded at the free OH groups only at a DSs .ltoreq. 0.5, without an indication of transesterification, whereas in the case of a formate (DS .apprx. 2.5), much higher DS-values could be reached in connection with an elimination of formate groups by transesterification or hydrolysis.

ST homogeneous sulfation **cellulose acetate formate**; hydrolysis transesterification cellulose formate sulfation

IT Hydrolysis
Transesterification
(formate group elimination by, in sulfation of cellulose formate)

IT Hydroxyl group
(in cellulose acetate, sulfation at)

IT Sulfation
(of cellulose **acetate** vs. **cellulose formate** under homogeneous conditions)

IT Substituent effect
(on sulfation of cellulose **acetate** vs. **cellulose formate** under homogeneous conditions)

IT 9036-95-7, Cellulose formate
RL: USES (Uses)
(sulfation of cellulose acetate and, under homogeneous conditions)

IT 9004-35-7, Cellulose **acetate**
RL: USES (Uses)
(sulfation of **cellulose formate** and, under homogeneous conditions)

L26 ANSWER 47 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1992:262441 HCAPLUS
DN 116:262441
TI Spray drying as a process for microencapsulation and the effect of different coating polymers
AU Wan, Lucy S. C.; Heng, Paul W. S.; Chia, Cecilia G. H.
CS Dep. Pharm., Nat. Univ. Singapore, Singapore, 0511, Singapore
SO Drug Dev. Ind. Pharm. (1992), 18(9), 997-1011
CODEN: DDIPD8; ISSN: 0363-9045
DT Journal
LA English
CC 63-6 (Pharmaceuticals)

AB Microencapsulation of theophylline drug particles was carried out by a spray drying technique using an aq. system. Comparison was made between the use of a soln. and a suspension feed. The spray dried products obtained from a suspension feed were encapsulated and have better flowability. Various polymers, hydroxypropyl Me **cellulose acetate succinate** (HPMCAS), hydroxypropyl Me cellulose (HPMC), Me cellulose (MC) and **sodium** CM-cellulose (NaCMC) were studied to evaluate their spray-coating properties. Drug release from the coated products was dependent on the hydrophilicity of the polymer. HPMC and MC produced products with similar dissoln. profiles and flow properties. Spray coating with HPMCAS was unsuccessful. The polymers also affect the size and cohesiveness of the products. Smaller size particles which are more cohesive cause agglomeration and delay release of the drug.

ST microencapsulation spray drying coating polymer

IT Hydrophilicity
(of polymers, microencapsulation by spray drying in relation to)

IT Solution rate

(of theophylline, from microcapsules prepd. by spray drying)
IT Particle size
(of theophylline-contg. microcapsules prepd. by spray drying)
IT Encapsulation
(micro-, spray drying in, coating polymers effect on)
IT Pharmaceutical dosage forms
(microcapsules, spray drying in prepn. of, coating polymers effect on)
IT Drying
(spray, in microencapsulation, coating polymers effect on)
IT 7732-18-5
RL: BIOL (Biological study)
(hydrophilicity, of polymers, microencapsulation by spray drying in relation to)
IT 9004-32-4, **Sodium** CM-cellulose 9004-65-3, Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate**
RL: BIOL (Biological study)
(microencapsulation by spray drying in relation to, as coating)
IT 58-55-9, Theophylline, biological studies
RL: BIOL (Biological study)
(microencapsulation of, spray drying in, coating polymers effect on)

L26 ANSWER 48 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1992:201097 HCAPLUS
DN 116:201097
TI Preparation of granules with spherical seed cores
IN Kamada, Etsuo
PA Asahi Chemical Industry Co., Ltd., Japan
SO Eur. Pat. Appl., 15 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM A61K009-16
ICS A61K009-50
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 452862	A2	19911023	EP 91-105993	19910416
	EP 452862	A3	19930224		
	EP 452862	B1	19950719		
	R: CH, DE, FR, GB, IT, LI				
	JP 07173050	A2	19950711	JP 90-404734	19901221
	JP 2542122	B2	19961009		
	AU 9175043	A1	19911024	AU 91-75043	19910417
	AU 619140	B2	19920116		
	CN 1055875	A	19911106	CN 91-102411	19910417
	US 5384130	A	19950124	US 93-3661	19930112
	US 5505983	A	19960409	US 94-325952	19941017
PRAI	JP 90-100251	19900418			
	JP 90-404734	19901221			
	US 91-686481	19910417			
	US 93-3661	19930112			

AB Pharmacolog. inactive spherical seed cores comprise .gtoreq.50 % microcryst. cellulose with av. degree of polymn. of 60-375, av. particle size of 100-1000 .mu.m, a tapped bulk d. of .gtoreq.0.65

g/mL, and aspect ratio of .gtoreq.0.7, a water absorption capacity of 0.5-1.5 mL/g and a friability of .ltoreq.1%. The spherical seed cores which are coated with active ingredients and sprayed with aq. coating soln. are used for prepn. of spherical granules. Microcryst. cellulose with crystallinity of 65% was mixed with water and granulated; the resulting granules were made into spheres, dried and sieved to obtain seed cores with av. particle size of 380 .mu.m. The spherical seed cores were sprayed with hydroxypropyl cellulose and coated with a powder compn. contg. theophylline 240, sucrose 180, and corn starch 180 g to obtain granules which were coated with a suspension contg. Aquacoat 400, and Myvacet 9-40 30 g and were dried. The degree of aggregation of granules was 0.5 as compared to 3.6% for control.

ST nonpareil cellulose pharmaceutical; theophylline granule cellulose core

IT Syrups
(binding agent, for pharmaceutical nonpareil)

IT Shellac
Siloxanes and Silicones, biological studies
RL: BIOL (Biological study)
(coating agent, for pharmaceutical nonpareil)

IT Pharmaceutical dosage forms
(granules, sustained-release, nonpareils manufd. with microcryst. cellulose in)

IT 9000-01-5, Gum arabic 9003-39-8, Polyvinyl pyrrolidone 9004-32-4, **Sodium** carboxymethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose 9005-25-8, Starch, biological studies
RL: BIOL (Biological study)
(binding agent, for pharmaceutical nonpareil)

IT 79-10-7D, 2-Propenoic acid, polymer 9004-32-4, Carboxymethyl cellulose 9004-35-7, Cellulose acetate 9004-38-0, Cellulose acetate phthalate 9004-57-3, Ethyl cellulose 71138-97-1, Hydroxypropylmethyl **cellulose acetate succinate** 138264-21-8
RL: BIOL (Biological study)
(coating agent, for pharmaceutical nonpareil)

IT 9004-34-6, Cellulose, biological studies
RL: BIOL (Biological study)
(microcyst., pharmaceutical nonpareil manuf. with)

IT 58-55-9, Theophylline, biological studies 24380-14-1
RL: BIOL (Biological study)
(pharmaceutical nonpareil coating with, for granule manuf.)

L26 ANSWER 49 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1992:91491 HCAPLUS
DN 116:91491
TI Dental paste composition containing metal hydroxides
IN Shibuya, Mutsumi; Ishii, Satomi
PA Showa Pharmaceutical Chemical Industry Co., Ltd., Japan
SO Eur. Pat. Appl., 8 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM A61K006-00
ICS A61K006-02; A61C005-00
CC 63-7 (Pharmaceuticals)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI	EP 464545	A2	19920108	EP 91-110350	19910622
	EP 464545	A3	19921028		
	EP 464545	B1	19941130		
	R: DE, FR, GB				
	JP 04059713	A2	19920226	JP 90-167788	19900626
	JP 06062381	B4	19940817		
	US 5236496	A	19930817	US 91-714619	19910613
PRAI	JP 90-167788	19900626			

AB A paste compn. useful for pulpotomy and for stimulating the formation of osteoid scar comprises (1) 20-60 % an alk. earth metal hydroxide selected from Ca(OH)2, Mg(OH)2, **Sr**(OH)2, and their mixts., (2) 20-60 % a polyhydric alc., (3) 0.5-5 % an alkali-sol. cellulose deriv., and (4) water balance. The compn. shows an excellent adhesion to dental pulp and tooth substance when applied to a section of pulp or the wall of pulp canal, and as a consequence, the compn. can remain on the applied location for a long time to effectively stimulate the formation of osseous tissue. For example, a compn. contained Ca(OH)2 50, propylene glycol 35, hydroxypropyl Me **cellulose acetate succinate** 1.5, and distd. water 13.5 %.

ST dental paste metal hydroxide cellulose; polyhydric alc dental paste; osteosis tooth paste metal hydroxide

IT Alkaline earth hydroxides
RL: BIOL (Biological study)
(dental pastes contg., for osteosis and pulpotomy)

IT Tooth
(osteosis, pastes contg. metal hydroxides and polyhydric alcs. and cellulose derivs. for)

IT Dental materials and appliances
(pastes contg. metal hydroxides and polyhydric alcs. and cellulose derivs. in, for pulpotomy and osteosis)

IT Alcohols, biological studies
RL: BIOL (Biological study)
(polyhydric, dental pastes contg. metal hydroxides and, for osteosis and pulpotomy)

IT Tooth
(pulpotomy, pastes contg. metal hydroxides and polyhydric alcs. and cellulose derivs. for)

IT 57-55-6, Propylene glycol, biological studies 9004-38-0, Cellulose acetate phthalate 25322-68-3, Polyethylene glycol 25322-69-4, Polypropylene glycol 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate** 98723-86-5
RL: BIOL (Biological study)
(dental pastes contg. metal hydroxide and, for osteosis and pulpotomy)

IT 1305-62-0, **Calcium** hydroxide, biological studies 1309-42-8, **Magnesium** hydroxide 18480-07-4, **Strontium** hydroxide
RL: BIOL (Biological study)
(dental pastes contg., for osteosis and pulpotomy)

L26 ANSWER 50 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1992:67209 HCAPLUS
DN 116:67209
TI Pharmaceutical composition for the targeted controlled release of an active principle within the intestine, and particularly within the colon
IN Calanchi, Massimo; Zema, Marco; Brunetti, Gabriele; Giorgetti, Enzo

PA Giuliani S.p.A., Italy
SO Eur. Pat. Appl., 7 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM A61K009-24
ICS A61K009-54
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 453001	A1	19911023	EP 91-200173	19910129
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	CA 2035155	AA	19911018	CA 91-2035155	19910129
	JP 04224517	A2	19920813	JP 91-27784	19910130
	WO 9116042	A1	19911031	WO 91-EP688	19910409
	W: AU, JP, KR, SU				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
	AU 9176798	A1	19911111	AU 91-76798	19910409
	AU 654277	B2	19941103		
	EP 524989	A1	19930203	EP 91-907396	19910409
	EP 524989	B1	19961016		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	JP 05506217	T2	19930916	JP 91-506876	19910409
	AT 144138	E	19961115	AT 91-907396	19910409
	ES 2093097	T3	19961216	ES 91-907396	19910409
	CA 2040471	AA	19911018	CA 91-2040471	19910415
	ZA 9102792	A	19921230	ZA 91-2792	19910415
PRAI	IT 90-20054	19900417			
	WO 91-EP688	19910409			

AB The title compns. comprise an active agent selected from 5-aminosalicylic acid, its derivs., peppermint oil, and corticosteroids, in the form of multiparticles covered with .gtoreq.2 membranes, one of which is sol. at a pH .gtoreq.5.5 and the other being insol. at the same pH but permeable to the intestinal fluids. The preferred polymer for the pH-dependent membrane is Eudragit S. The compns. are effective for the local treatment of chronic intestinal diseases of inflammatory and irritative type. 5-Aminosalicylic acid granulated with hydroxypropyl Me cellulose was covered with a first membrane of Eudragit S and a second membrane of Et cellulose. The granules were placed 2 h in 0.1 N HCl soln., 1 h in pH 6.2 buffer, and 5 h in pH 7.2 buffer and drug release amts. were detd.

ST controlled drug release coating intestine; aminosalicylate granule Eudragit cellulose coating

IT Corticosteroids, biological studies
RL: BIOL (Biological study)
(controlled-release oral compns. of, for delivery in intestine)

IT Shellac
Siloxanes and Silicones, biological studies
RL: BIOL (Biological study)
(pharmaceutical granules coating with, for controlled drug release in intestine)

IT Intestine, disease
(enteritis, treatment of, oral formulation designed for colon targeting in)

IT Pharmaceutical dosage forms
(oral, controlled-release, double coatings with pH-dependent membranes and pH-independent membranes in, for delivery in

intestine)
IT Essential oils
RL: BIOL (Biological study)
(peppermint, controlled-release oral compns. of, for delivery in intestine)
IT 89-57-6, 5-Aminosalicylic acid
RL: BIOL (Biological study)
(controlled-release oral compns. of, for delivery in intestine)
IT 88-99-3D, Phthalic acid, derivs., copolymers with maleic acid 110-16-7D, Maleic acid, copolymers with phthalate 9002-88-4, Polyethylene 9003-39-8, Polyvinylpyrrolidone 9004-32-4, **Sodium** carboxymethyl cellulose 9004-38-0, Cellulose acetate phthalate 9004-57-3, Ethyl cellulose 9004-62-0, Hydroxyethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose 9050-31-1, Hydroxypropyl methyl cellulose phthalate 26589-39-9 33434-24-1, Eudragit RL 51822-44-7 52907-01-4, Cellulose acetate trimellitate 53237-50-6 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate** 138636-14-3, Eudragit NE
RL: BIOL (Biological study)
(pharmaceutical granules coating with, for controlled drug release in intestine)

L26 ANSWER 51 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1992:67179 HCAPLUS
DN 116:67179
TI Enteric-coated pharmaceuticals containing peptides
IN Saeki, Yasuji; Murahashi, Naoichi; Tsuda, Toshiro; Watanabe, Sumio
PA Eisai Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM A61K037-02
ICS A61K009-32; A61K009-36; A61K037-24; A61K037-26; A61K037-30; A61K037-54; A61K047-12; A61K047-32; A61K047-38
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03086834	A2	19910411	JP 90-167329	19900626
PRAI	JP 89-166069		19890628		

AB The pharmaceuticals contg. peptides or proteins and acids are coated with enteric film. The prepns. show high bioavailability since the acids in the core inhibit proteinase activity in digestive tract. A compn. contg. Arg(Me)-L-Lys-L-Pro-L-Trp-L-Tle-L-Leu-OEt.3HCl (I) (Tle = tert-leucine) 275, citric acid 275, mannitol 1375, cryst. cellulose 990, corn starch 330, poly(vinylpyrrolidone) 44, and Mg stearate 11 mg was made into tablets (300 mg/tablet), which were successively coated with a compn. contg. 50 g hydroxypropyl cellulose and 10 g Mg stearate in EtOH then a compn. contg. hydroxypropyl Me cellulose phthalate 300, TiO2 15, talc 30, Myvacet 30 g in EtOH/H2O to give enteric-coated tablets. The tablet was orally administered to dog, AUC (area under the curve) of I was 706.64 ng-h/mL, vs. 302.78 ng-h/mL for a control tablets contg. no citric acid.
ST peptide pharmaceutical enteric bioavailability
IT Drug bioavailability

(of peptides or proteins, from enteric-coated prepns.)
IT Acrylic polymers, biological studies
RL: BIOL (Biological study)
(pharmaceuticals coated with, peptide-contg.)
IT Peptides, biological studies
Proteins, biological studies
RL: BIOL (Biological study)
(pharmaceuticals contg. acids and, enteric coated)
IT Acids, biological studies
RL: BIOL (Biological study)
(pharmaceuticals contg. peptides and, enteric coated)
IT Pharmaceutical dosage forms
(enteric-coated, of peptides with acids)
IT 1393-25-5, Secretin 9004-06-2, Elastase 12584-58-6, Insulin (pig) 47931-85-1, Calcitonin (salmon) 105913-11-9D, Plasminogen activator, derivs. 132363-45-2 138647-97-9 138647-98-0 138678-18-9
RL: BIOL (Biological study)
(enteric-coated pharmaceuticals contg. acids and)
IT 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate**
RL: BIOL (Biological study)
(peptides or proteins enteric-coated pharmaceuticals coated with)
IT 50-81-7, Ascorbic acid, biological studies 77-92-9, biological studies 87-69-4, Tartaric acid, biological studies 110-15-6, Butanedioic acid, biological studies 110-16-7, Maleic acid, biological studies 110-17-8, Fumaric acid, biological studies 110-44-1, Sorbic acid 141-82-2, Malonic acid, biological studies 526-95-4, Gluconic acid 6915-15-7, Malic acid 7558-80-7, **Sodium** dihydrogen phosphate 9050-31-1, Hydroxypropyl methyl cellulose phthalate
RL: BIOL (Biological study)
(pharmaceuticals contg. peptides and, enteric coating of)

L26 ANSWER 52 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1992:27862 HCAPLUS
DN 116:27862
TI Bath salts containing polymer-coated inorganic pigments
IN Yoneyama, Tsunehide
PA Takasago Perfumery Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM A61K007-50
CC 62-4 (Essential Oils and Cosmetics)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03206028	A2	19910909	JP 90-1098	19900109

AB Bath prepns. contg. inorg. pigments coated with polymers reactive with alkali are claimed. Coating with polymers improves dispersibility and stability of inorg. pigments and the bath salts give various color in bath water. TiO2 was dispersed in an acetone soln. of cellulose acetate phthalate under stirring at room temp. for 15 min and heated at 60.degree. for 24 h, the obtained dried matter was pulverized to give polymer-coated TiO2 particles. A compn. contg. the coated TiO2 10, NaHCO3 38, Na2SO4 36, NaCl 12, SiO2 1, perfume 2, and poly(oxyethylene)(10) lauryl ether phosphate

Na 1 g was put in a bath tub to give milk-white bath water with the transmittancy 55% and 56% on storage at 40.degree. for 3 wk, vs. 80% and 90%, resp., for a control bath salt contg. uncoated TiO2.

ST bath prepn pigment polymer coating

IT Pigments
(inorg. pigments coated with., for bath prepns.)

IT Polymers, biological studies
RL: PREP (Preparation)
(pigments coated with., bath prepns. contg.)

IT Bath preparations
(salts, contg. polymer-coated inorg. pigments)

IT 9004-38-0, Cellulose acetate phthalate 9050-31-1, Hydroxypropyl methyl cellulose phthalate 37371-09-8, Poly(vinyl alcohol) phthalate 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate** 75026-18-5, Starch acetate phthalate
RL: BIOL (Biological study)
(inorg. pigments coated with., for bath prepns.)

IT 471-34-1, **Calcium** carbonate, uses 546-93-0, **Magnesium** carbonate 13463-67-7, Titania, uses 57455-37-5, Ultramarine (pigment)
RL: BIOL (Biological study)
(polymer-coated, bath prepns. contg.)

L26 ANSWER 53 OF 85 HCAPLUS COPYRIGHT 1998 ACS

AN 1991:542283 HCAPLUS

DN 115:142283

TI Sustained-release preparation of basic medical agent hydrochloride

IN Uemura, Akira; Samizo, Fumio; Noguchi, Tetsuo

PA Sumitomo Pharmaceuticals Co., Ltd., Japan

SO Eur. Pat. Appl., 15 pp.
CODEN: EPXXDW

DT Patent

LA English

IC ICM A61K009-52

CC 63-6 (Pharmaceuticals)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 425298	A2	19910502	EP 90-311748	19901026
	EP 425298	A3	19910911		
	EP 425298	B1	19940413		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	JP 03145418	A2	19910620	JP 89-280579	19891027
	CA 2028633	AA	19910428	CA 90-2028633	19901026
	US 5234691	A	19930810	US 90-603484	19901026
	AT 104146	E	19940415	AT 90-311748	19901026
PRAI	JP 89-280579	19891027			
	EP 90-311748	19901026			

AB A sustained-release oral prepn. comprises coated granules contg. both a basic active agent in the form of HCl salt and polyanion particles which are present in a discontinuous layer to allow a drug release at a controlled rate without being influenced by the physiol. factors of the gastrointestinal tract. The polyanion is a carboxyvinyl polymer, CM cellulose, or their salts. Granules contg. arotinolol-HCl (I) 200, Ca CM cellulose 200, and polyvinyl alc. 24 g were coated with a liq. contg. Et cellulose 90, hydroxypropyl Me cellulose 10, EtOH 450, and CH2Cl2 450 g. A dissoln. test showed

that the release of I from the granules was not affected by a compn., fluidity, and the like of the liq. in release environment.

ST arotinolol hydrochloride sustained release granule

IT Pharmaceutical dosage forms
(capsules, sustained-release, of arotinolol hydrochloride, carboxyvinyl polymers and CM cellulose in)

IT Vinyl compounds, polymers
RL: BIOL (Biological study)
(carboxy-contg., polymers, sustained-release coated granules contg. arotinolol hydrochloride and)

IT Pharmaceutical dosage forms
(granules, coated, sustained-release, of arotinolol hydrochloride, carboxyvinyl polymers and CM cellulose in)

IT Pharmaceutical dosage forms
(tablets, sustained-release, of arotinolol hydrochloride, carboxyvinyl polymers and CM cellulose in)

IT 79-41-4D, amino alkyl derivs. 79-41-4D, copolymers 9004-57-3, Ethyl cellulose 9004-65-3 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate**
RL: BIOL (Biological study)
(coating soln. for arotinolol granules contg.)

IT 68377-91-3, Arotinolol hydrochloride
RL: BIOL (Biological study)
(sustained-release coated granules contg.)

IT 9004-32-4D, Carboxymethyl cellulose, salts 9050-04-8, **Calcium** carboxymethyl cellulose
RL: BIOL (Biological study)
(sustained-release coated granules contg. arotinolol hydrochloride and)

L26 ANSWER 54 OF 85 HCAPLUS COPYRIGHT 1998 ACS

AN 1991:451028 HCAPLUS

DN 115:51028

TI Film-forming electrosensitive media based on cation-exchange derivatives of cellulose

AU Lazareva, T. G.; Korobko, E. V.; Borisenko, E. M.; Ermolenko, I. N.

CS Inst. Obshch. Neorg. Khim., Minsk, USSR

SO Vestsi Akad. Navuk BSSR, Ser. Khim. Navuk (1990), (6), 33-8
CODEN: VBSKAK; ISSN: 0002-3590

DT Journal

LA Russian

CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 43

AB The sensitivity of the viscosity of the title suspensions of cellulose phosphate (I) and cellulose carboxymethyl ether (II) fillers to changes in elec. field strength depended on the compn. of the suspension, i.e., the solvent type, the polymer binder type, component concns., and the functional group content of the polymer binder. The polymer binders tested were cellulose diacetate, cellulose acetate phthalate (III), **cellulose acetate succinate**, cellulose hydroxyethyl ether (IV), cellulose hydroxypropyl ether (V), II **Na** salt, and poly(vinyl alc.) (VI). Polar solvents were unsuitable for obtaining suspensions with good sensitivity; the best results were obtained using dioxane and heptane as solvents. Suspensions contg. IV- and VI-based binders exhibited slightly lower sensitivities than those based on III, while suspensions contg. II **Na** salt- and V-based binders were practically insensitive under the conditions of the study. 10% Suspensions of I and II with optimal sensitivity

were obtained by using 10% dioxane solns. of III contg. the max. amt. of phthalyl groups (31%) as the binder. The results suggested that polymer binders contg. acidic functional groups were the best choice for prepn. of the electrorheol. suspensions.

ST electrorheol suspension cellulose deriv; viscosity cellulosic electrorheol suspension compn; CM cellulose electrorheol suspension; phosphate cellulose electrorheol suspension

IT Suspensions
(electrorheol., of cellulose derivs., viscosity of, elec. field strength dependence of, compn. effect on)

IT Binding materials
(functionalized polymers, cellulose deriv. electrorheol. suspensions contg., viscosity of, elec. field strength dependence of)

IT Viscosity
(of cellulose deriv. electrorheol. suspensions, elec. field strength effect on, suspension compn. in relation to)

IT Solvent effect
(on viscosity of cellulose deriv. electrorheol. suspensions in elec. field)

IT Electric field, chemical and physical effects
(on viscosity of cellulose deriv. electrorheol. suspensions, suspension compn. in relation to)

IT Transformers
(oils, cellulose deriv. electrorheol. suspensions contg., viscosity of, elec. field strength dependence of)

IT 110-54-3, Hexane, uses and miscellaneous 123-91-1, Dioxane, uses and miscellaneous 142-82-5, Heptane, uses and miscellaneous 9002-89-5, Poly(vinyl alcohol) 9004-32-4, Cellulose carboxymethyl ether **sodium** salt 9004-38-0, Cellulose acetate hydrogen phthalate 9004-62-0, Cellulose hydroxyethyl ether 9004-64-2, Cellulose 2-hydroxypropyl ether 9032-35-3 9035-69-2, Cellulose diacetate
RL: USES (Uses)
(cellulose deriv. electrorheol. suspensions contg., viscosity of, elec. field strength dependence of)

IT 9004-32-4, Cellulose carboxymethyl ether 9015-14-9, Cellulose dihydrogen phosphate
RL: USES (Uses)
(electrorheol. suspensions, viscosity of, elec. field strength dependence of, suspension compn. effect on)

L26 ANSWER 55 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1991:30169 HCAPLUS
DN 114:30169
TI Water-dispersible polymeric compositions
IN Wu, Stephen H. W.; Greene, Carol J.; Sharma, Mahendra K.
PA Eastman Kodak Co., USA
SO U.S., 15 pp.
CODEN: USXXAM
DT Patent
LA English
IC G08L001-28; A61K009-32
NCL 524312000
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 62
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI US 4960814 A 19901002 US 88-205765 19880613
US 5025004 A 19910618 US 90-532826 19900604
PRAI US 88-205765 19880613
AB Disclosed is a process for prepg. polymeric compns. which are suitable for coating medicaments or for use in cosmetic formulations. The process makes stable, colloidal, latex-like dispersions of coating polymers which can be readily dried to form polymeric powder materials. The process makes use of a novel combination of a water-in-oil emulsifier and an oil-in-water emulsifier. It comprises contacting an org. solvent system contg. .gtoreq.1 water-insol. polymer and .gtoreq.1 low-mol.-wt. volatile water-immiscible solvent, with a surfactant mixt. contg. .gtoreq.1 polymeric, water-sol. or -dispersible, nonionic, oil-in-water emulsifier and .gtoreq.1 water-insol., anionic or amphoteric water-in-oil emulsifier which is more hydrophobic than and compatible with the oil-in-water emulsifier and is dispersible in the solvent system. Thus, cellulose acetate phthalate was dissolved in EtOAc/Me2CHOH and to this was added Pluronic F127 and Emphos D70-30C. The soln. was then emulsified by addn. at H2O. Solvent was then removed and the dispersion was dried. The powder was then used in enteric coatings for aspirin tablets.
ST polymer coating dispersion pharmaceutical cosmetic
IT Lecithins
Lysophosphatidic acids
Lysophospholipids
Phosphatidic acids
Acrylic polymers, biological studies
Phospholipids, biological studies
Polymers, biological studies
Polyethers, uses and miscellaneous
Polyoxyalkylenes, uses and miscellaneous
RL: BIOL (Biological study)
(coating material manuf. with, for pharmaceuticals and cosmetics)
IT Cosmetics
(polymeric aq. dispersions in)
IT Glycerides, biological studies
RL: BIOL (Biological study)
(di-, phosphorylated, coating material manuf. with, for pharmaceuticals and cosmetics)
IT Pharmaceutical dosage forms
(enteric-coated, manuf. of, polymeric dispersions for)
IT Sunburn and Suntan
(suntanning agents, manuf. of, polymeric dispersions for)
IT 37259-90-8
RL: BIOL (Biological study)
(coating material manuf. with, for pharmaceuticals and cosmetics)
IT 77-92-9D, Citric acid, monoglycerides 4345-03-3, .alpha.-Tocopherol hemisuccinate 5793-94-2, **Calcium** stearoyl lactylate 9003-53-6D, Polystyrene, dimethylaminoethyl-modified 9003-54-7D, Acrylonitrile-styrene copolymer, imiazoline-modified 9004-35-7 9004-36-8, Cellulose acetate butyrate 9004-38-0, Cellulose acetate phthalate 9004-39-1, Cellulose acetate propionate 9004-57-3, Ethyl cellulose 9006-26-2, Ethylene-maleic anhydride copolymer 9010-88-2, Ethyl acrylate-methyl methacrylate copolymer 9011-13-6, Maleic anhydride-styrene copolymer 9011-16-9, Maleic anhydride-methyl vinyl ether copolymer 9032-35-3, **Cellulose acetate succinate** 9050-31-1, Hydroxypropyl methyl cellulose phthalate 18200-72-1 24938-40-7,

2-Methyl-5-vinylpyridine-styrene copolymer 24980-54-9, Styrene-2-vinylpyridine copolymer 25014-15-7, Poly(2-vinylpyridine) 25038-59-9, Poly(ethylene terephthalate), biological studies 25232-41-1, Poly(4-vinylpyridine) 25496-72-4 27755-56-2, Poly(2-vinyl-5-ethylpyridine) 52682-90-3 52907-01-4, Cellulose acetate trimellitate 69865-27-6 70726-37-3, Cellulose propionate morpholinobutyrate 81209-23-6, Emphos D70-30C 84419-85-2, Diethylaminomethyl cellulose 84419-89-6 84992-06-3 106392-12-5, Tergitol XH
RL: BIOL (Biological study)
(coating material prepn. with, for pharmaceuticals and cosmetics)

IT 79-10-7D, Acrylic acid, esters, polymers 108-31-6D, Maleic anhydride, polymers 9003-47-8D, Poly(vinylpyridine), derivs. 9003-53-6D, Polystyrene, derivs. 9004-34-6, Cellulose, biological studies 9004-34-6D, Cellulose, esters 9005-64-5 9005-67-8 9005-71-4 9019-70-9D, Styrene-vinylpyridine copolymer, derivs. 34346-01-5D, Glycolic acid-lactic acid copolymer, derivs. 106392-12-5, Poloxamer
RL: BIOL (Biological study)
(coating materials contg., for pharmaceuticals and cosmetics)

IT 50-78-2, Aspirin 56592-32-6, Efrotomycin
RL: BIOL (Biological study)
(enteric coating for, polymer compns. for)

IT 131-57-7, 2-Hydroxy-4-methoxy benzophenone
RL: BIOL (Biological study)
(in aq. dispersions of water-insol. polymers for suntan lotion)

L26 ANSWER 56 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1991:12206 HCAPLUS
DN 114:12206
TI Hydrophobic polymer-coated controlled-release pharmaceutical preparation and method for producing the same
IN Samejima, Masayoshi; Noda, Kazuo; Hira, Yoshiyuki
PA Tanabe Seiyaku Co., Ltd., Japan
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 16 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
IC ICM A61K009-22
ICS A61K009-30; A61K047-00
CC 63-6 (Pharmaceuticals)
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1037457	A	19890330	CN 89-101930	19890330
	CN 1023933	B	19940309		
	JP 02001405	A2	19900105	JP 89-30882	19890209
	JP 07091184	B4	19951004		
	FI 8901163	A	19891001	FI 89-1163	19890310
	NO 8901052	A	19891002	NO 89-1052	19890313
	NO 178136	B	19951023		
	NO 178136	C	19960131		
	ZA 8902131	A	19891129	ZA 89-2131	19890321
	ES 2059729	T3	19941116	ES 89-302767	19890321
	US 5068112	A	19911126	US 89-329408	19890324
	DK 8901562	A	19891001	DK 89-1562	19890330
	AU 8932273	A1	19891005	AU 89-32273	19890330
	AU 610711	B2	19910523		
	SU 1836083	A3	19930823	SU 89-4613813	19890330

	FR 2629344	A1	19891006	FR 89-4288	19890331
	FR 2629344	B1	19940916		
	HU 50050	A2	19891228	HU 89-1612	19890331
	HU 201882	B	19910128		
	CA 1339078	A1	19970729	CA 89-595401	19890331
	US 5254347	A	19931019	US 91-729841	19910712
PRAI	JP 88-80604	19880331			
	US 89-329408	19890324			

AB The title pharmaceuticals are manufd. by coating active ingredient-contg. cores with a porous membrane contg. hydrophobic polymers or hydrophobic polymer-hydrophilic polymer mixts. Membrane substances and a carboxylic acid may incorporate into the cores. The hydrophobic polymer is e.g. cellulose ethers. Thus, theine-contg. nonpareil cores were coated with Me cellulose - hydroxypropyl cellulose (90:10) mixt. to give a controlled-release prepn.

ST controlled release pharmaceutical hydrophobic polymer coating; cellulose ether controlled release pharmaceutical

IT Pharmaceutical dosage forms
(controlled-release, hydrophobic polymer coating in)

IT 9002-88-4, Polyethylene 9002-89-5, Polyvinyl alcohol 9003-39-8, Polyvinyl pyrrolidone 9004-32-4 9004-35-7, Cellulose acetate 9004-36-8, Cellulose acetate butyrate 9004-57-3, Ethylcellulose 9004-64-2, Hydroxypropyl cellulose 9004-67-5, Methyl cellulose 9032-35-3, **Cellulose acetate succinate** 25085-79-4 25322-68-3 51822-44-7 52678-25-8
RL: USES (Uses)
(coatings contg., for controlled-release pharmaceuticals)

IT 54-21-7, **Sodium** salicylate 58-08-2, biological studies 131149-45-6
RL: BIOL (Biological study)
(controlled-release pharmaceutical contg., hydrophobic polymer coating in)

L26 ANSWER 57 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1991:12071 HCAPLUS
DN 114:12071
TI Molecular behavior and dissolution characteristics of uracil in ground mixtures
AU Baba, Kazuhiko; Takeichi, Yohichiro; Nakai, Yoshinobu
CS Pharm. Res. Lab., Taiho Pharm. Co., Ltd., Tokushima, 771-01, Japan
SO Chem. Pharm. Bull. (1990), 38(9), 2542-6
CODEN: CPBTAL; ISSN: 0009-2363
DT Journal
LA English
CC 63-5 (Pharmaceuticals)

AB Ground mixts. contg. uracil were prepd. by using various additives such as celluloses, proteins, cyclodextrins, enteric-coating agents and inorg. compds. in a planetary ball mill. The amorphous state of uracil was obsd. in the x-ray diffraction patterns of some of the ground mixts. The results of IR anal. indicated deprotonation of uracil after 30 h grinding with **Na** polyglutamate. All ground mixts. showed the transient supersatn. of uracil in dissoln. studies. The initial amt. of uracil dissolved from the 30-h ground mixts. with **Na** benzoate derivs., Et cellulose, hydroxypropyl Me **cellulose acetate succinate** and proteins was 2.5-9-fold that dissolved from intact uracil. The crystallinity and soly. of uracil in the ground mixts. were affected by the mixing ratio, grinding time and moisture

content of the additive.
ST uracil dissoln ground mixt; mol property uracil grinding
IT Solubilization
(of uracil, by excipients in ground mixts.)
IT Solution rate
(of uracil, from ground mixts.)
IT Crystallinity
(of uracil, in ground mixts.)
IT Pharmaceutical dosage forms
(of uracil, in ground mixts., drug dissoln. from)
IT Albumins, properties
Collagens, properties
Polymers, properties
Polysaccharides, properties
Proteins, properties
RL: BIOL (Biological study)
(uracil dissoln. and mol. behavior in ground mixts. with)
IT Size reduction
(grinding, of uracil, in mixts., drug dissoln. and mol. properties in relation to)
IT 66-22-8, Uracil, biological studies
RL: BIOL (Biological study)
(dissoln. and mol. behavior of, in ground mixts.)
IT 9004-34-6, Cellulose, biological studies
RL: BIOL (Biological study)
(microcryst., uracil dissoln. and mol. behavior in ground mixts. with)
IT 54-86-4, **Sodium** nicotinate 57-13-6, Urea, biological studies 57-48-7, Fructose, biological studies 73-24-5, Adenine, biological studies 98-92-0, Nicotinamide 527-07-1, **Sodium** gluconate 532-32-1, **Sodium** benzoate 935-70-6, **Sodium** 2,6-dihydroxybenzoate 1309-48-4, **Magnesium** oxide, biological studies 1344-28-1, Aluminum oxide, biological studies 1398-61-4, Chitin 7585-39-9, .beta.-Cyclodextrin 7631-86-9, Silica, biological studies 7786-30-3, **Magnesium** chloride, biological studies 9000-01-5, Acacia gum 9001-00-7, Bromelain 9001-73-4, Papain 9003-39-8 9004-32-4, Carboxymethyl cellulose **sodium** salt 9004-53-9, Dextrin 9004-54-0, Dextran, biological studies 9004-57-3, Ethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9005-25-8, Starch, biological studies 9011-13-6, Styrene-maleic anhydride copolymer 9012-76-4, Chitosan 9050-31-1, Hydroxypropyl methyl cellulose phthalate 9057-02-7, Pullulan 9080-79-9 9082-07-9, **Sodium** chondroitin sulfate 10016-20-3, .alpha.-Cyclodextrin 15595-35-4, L-Arginine hydrochloride 17465-86-0, .gamma.-Cyclodextrin 25086-15-1, Eudragit L-100 25086-89-9 25322-68-3, PEG-6000 26161-42-2 26247-79-0 26811-96-1 28680-04-8, **Sodium** polyglutamate SRU 33434-24-1, Eudragit RS 37205-99-5, Carboxymethyl ethyl cellulose 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate**
RL: BIOL (Biological study)
(uracil dissoln. and mol. behavior in ground mixts. with)

L26 ANSWER 58 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1990:633530 HCAPLUS
DN 113:233530
TI The preparation of highly absorbing cellulosic copolymers - the cellulose acetate/propionate-g.co-acrylic acid system

AU Bilgin, V.; Guthrie, J. T.
CS Dep. Colour Chem., Univ. Leeds, Leeds, LS2 9JT, UK
SO Radiat. Phys. Chem. (1990), 36(4), 581-7
CODEN: RPCHDM; ISSN: 0146-5724
DT Journal
LA English
CC 43-3 (Cellulose, Lignin, Paper, and Other Wood Products)
Section cross-reference(s): 35
AB A series of copolymers based on the cellulose acetate/propionate (I)-g.co-acrylic acid (II) system was prepd. under radiation-induced control. These copolymers were assessed for their water-retention capacity both in an unmodified state and after decrystn. or neutralization treatments. The grafting of II onto the I had little effect on the water retention power of the I. However, improvements to the water retentivity were obtained after decrystn. procedures were carried out on the copolymers using selected **alkali metal** salts with MeOH as the continuous medium. The water retentivity of the copolymers increased with increasing extent of grafting, though the effect was less pronounced at high graft levels. Neutralization of the functional groups of the grafted branches provided a route to obtaining a marked increase in the level of water retentivity. Excessive salt concns. gave reduced levels of water retentivity. Cs2CO3 and Na2CO3 have been shown to be effective in providing marked improvements in the water-retaining capacity of the copolymers. Max. in performance occurred with respect to the treatment conditions.
ST **acetate** propionate **cellulose acrylic** graft; water retention cellulose acrylic graft
IT Absorption
(of water, by acrylic acid-cellulose acetate propionate graft copolymer, **alkali metal** salt effect on)
IT Polymerization
(graft, radiochem., of acrylic acid on cellulose acetate propionate, **alkali metal** salt effect on)
IT 497-19-8, **Sodium** carbonate, properties 534-17-8, **Cesium** carbonate
RL: PRP (Properties)
(absorption of water by acrylic acid-cellulose acetate propionate graft copolymer in presence of)
IT 7732-18-5, Water, properties
RL: PRP (Properties)
(absorption of, by acrylic acid-cellulose acetate propionate graft copolymer, **alkali metal** salt effect on)
IT 130692-75-0P
RL: PREP (Preparation)
(prepn. and water absorption properties of, **alkali metal** salt effect on)

L26 ANSWER 59 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1990:618044 HCAPLUS
DN 113:218044
TI Combinative improving effect of increased solubility and the use of absorption enhancers on the rectal absorption of uracil in beagle dogs
AU Takeichi, Yohichiro; Baba, Kazuhiko; Kinouchi, Yoshihito; Iida, Yuichi; Umeno, Yukihiko; Muranishi, Shozo; Nakai, Yoshinobu
CS Pharm. Res. Lab., Taiho Pharm. Co., Ltd., Tokushima, 771-01, Japan
SO Chem. Pharm. Bull. (1990), 38(9), 2547-51
CODEN: CPBTAL; ISSN: 0009-2363

DT Journal
LA English
CC 63-5 (Pharmaceuticals)
Section cross-reference(s): 1
AB An improvement of the rectal absorption of uracil was examd. by the application of absorption enhancers in addn. to the increased soly. of uracil. Uracil was ground with additives such as MgO, **sodium** 2,6-dihydroxybenozate, human serum albumin or hydroxypropyl Me **cellulose acetate succinate**. Aq. oily and powdery formulations, which consisted of the ground mixts. nicotinamide, urea and absorption enhancers such as polyoxyethylene cetyl ether (BC-23) or **Na** caprate, were prepd. Uracil soly. in the aq. formulations was increased about 4-13-fold the soly. in the corresponding control formulations. When rectally administered to beagle dogs, marked increases in the plasma uracil level were obsd. in some of the cases of aq. and oily formulations. In the powdery formulations and formulations contg. macromol. additives, however, absorption improvement was not obsd. An improvement in the absorption of uracil was caused by a combination of improvement in the effect of the increased uracil soly. and the promoting effect of absorption enhancers.
ST uracil bioavailability rectum enhancer solubilization
IT Solution rate
(of uracil, from rectal formulations, absorption enhancers and solubilization effect on)
IT Solubilization
(of uracil, rectal bioavailability response to)
IT Drug bioavailability
(of uracil, rectal, absorption enhancers and solubilization effect on)
IT Albumins, biological studies
RL: BIOL (Biological study)
(uracil bioavailability from rectal formulations contg.)
IT Glycerides, biological studies
RL: BIOL (Biological study)
(C8-12, uracil bioavailability from rectal formulations contg.)
IT Pharmaceutical dosage forms
(rectal; uracil bioavailability from, absorption enhancers and solubilization effect on)
IT 66-22-8, Uracil, biological studies
RL: BIOL (Biological study)
(bioavailability of, rectal, absorption enhancers and solubilization effect on)
IT 57-13-6, Urea, biological studies 98-92-0, Nicotinamide 935-70-6, **Sodium** 2,6-dihydroxybenzoate 1309-48-4, **Magnesium** oxide, biological studies 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate**
RL: BIOL (Biological study)
(uracil bioavailability from rectal formulations contg.)
IT 1002-62-6, **Sodium** caprate 9004-95-9
RL: BIOL (Biological study)
(uracil bioavailability from rectal formulations contg., as absorption enhancer)

L26 ANSWER 60 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1990:578259 HCAPLUS
DN 113:178259

TI Adhesive film containing lysozyme chloride for treatment of gingivitis and pyorrhea
IN Takayanagi, Hitoshi; Nagata, Kyonori; Saigo, Takeji; Sawai, Yoshihiro
PA Kyukyu Yakuhin Kogyo K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM A61K037-54
ICS A61K009-70
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 01279838	A2	19891110	JP 88-108053	19880430
JP 05009412	B4	19930204		

AB An adhesive water-sol. film for treatment of gingivitis and pyorrhea contains lysozyme chloride and .gtoreq.1 compds. selected from the group consisting of allantoin, hinokitiol, peppermint oil, tocopherol acetate, chamomile tincture, cetylpyridinium chloride, chlorohexidine-HCl, Et aminobenzoate, dibucaine-HCl, hexothiocaine-HCl, decalinium chloride, glycyrrhetinic acid, di-**K** glycyrrhizinate, thymol, benzalkonium chloride, diphenhydramine salicylate, nitrofurazone, **Na** Ca edetate, PhOH, **Na** Cu chlorophyllin, and NaCl. The film itself is made of polyvinylpyrrolidone, gelatins, poly(vinyl alc.), **Na** acrylate polymer, CM cellulose, starch, etc. Thus, the adhesion tape was prepd. consisting of hydroxylpropyl Me **cellulose acetate succinate**, shellac, Macrogol-400, TiO2, lysozyme chloride, hydroxypropyl cellulose, and a carboxyvinyl polymer.
ST adhesive film lysozyme gingivitis; pyorrhea adhesive film lysozyme
IT Chamomile
(tinctures, adhesive film contg. lysozyme chloride and, for gingivitis and pyorrhea treatment)
IT Quaternary ammonium compounds, biological studies
RL: BIOL (Biological study)
(alkylbenzyldimethyl, chlorides, adhesive film contg. lysozyme chloride and, for gingivitis and pyorrhea treatment)
IT Chlorophyllins
RL: BIOL (Biological study)
(copper complexes, **sodium** salts, adhesive film contg. lysozyme chloride and, for gingivitis and pyorrhea treatment)
IT Periodontium
(disease, compd. periodontitis, treatment of, adhesive film contg. lysozyme chloride for)
IT Gingiva
(disease, gingivitis, treatment of, adhesive film contg. lysozyme chloride for)
IT Oils, essential
RL: BIOL (Biological study)
(peppermint, adhesive film contg. lysozyme chloride and, for gingivitis and pyorrhea treatment)
IT Pharmaceutical dosage forms
(tapes, buccal, lysozyme chloride-contg., for gingivitis and pyorrhea treatment)
IT 59-87-0, Nitrofurazone 61-12-1 62-33-9, **Sodium calcium** edetate 89-83-8 97-59-6, Allantoin 108-95-2,

Phenol, biological studies 123-03-5, Cetylpyridinium chloride 471-53-4, Glycyrrhetinic acid 499-44-5, Hinokitiol 1333-08-0, Ethyl aminobenzoate 1406-70-8 3697-42-5, Chlorhexidine hydrochloride 7491-10-3 7647-14-5, **Sodium** chloride, biological studies 68797-35-3, Dipotassium glycyrrhizinate 115905-40-3, Decalinium chloride 129932-49-6, Hexothiocaine hydrochloride
RL: BIOL (Biological study)
(adhesive film contg. lysozyme chloride and, for gingivitis and pyorrhea treatment)

IT 9066-59-5
RL: BIOL (Biological study)
(adhesive film contg., for gingivitis and pyorrhea treatment)

IT 9000-36-6, Karaya gum 9002-89-5, Poly(vinyl alcohol) 9003-39-8, Polyvinylpyrrolidone 9004-32-4, Carboxymethyl cellulose 9004-38-0, Cellulose acetate phthalate 9004-64-2, Hydroxypropyl cellulose 9004-67-5, Methyl cellulose 9005-25-8, Starch, biological studies 9005-38-3, **Sodium** alginate 9050-31-1, Hydroxypropyl methyl cellulose phthalate 11138-66-2, Xanthan gum 25212-88-8 25549-84-2, **Sodium** acrylate polymer 37205-99-5, Carboxymethyl ethyl cellulose 71138-97-1, Hydroxypropyl methyl **cellulose acetate succinate**
RL: BIOL (Biological study)
(adhesive film manuf. with lysozyme chloride and, for gingivitis and pyorrhea treatment)

=> d l26 bib abs 61-85

L26 ANSWER 61 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1990:429267 HCAPLUS
DN 113:29267
TI Coated pharmaceuticals containing inhibitors of gastric secretion
IN Saeki, Yasuji; Koyama, Noritoshi; Kawahara, Masahiro; Watanabe, Sumio
PA Eisai Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

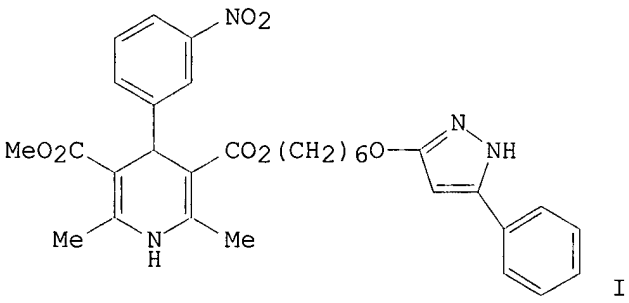
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 01193215	A2	19890803	JP 88-16286	19880127

AB A pharmaceutical that inhibits gastric acid secretion is prepd. by coating the active drug granules or tablets with enteric-sol. agent, followed by gastric-sol. agent. The enteric-sol. agents are hydroxypropyl Me cellulose phthalate, hydroxypropyl Me **cellulose acetate succinate**, etc., whereas the gastric-sol. agents are polyvinylacetal diethylaminoacetate, dimethylaminoethyl methacrylate-methacrylate copolymer. Thus, 2-[[4-(3-methoxypropoxy)-3-methylpyridin-2-yl]methylsulfinyl]-1H-benzimidazole **Na** salt 50, mannitol 530, and hydroxypropyl cellulose 10 g were dissolved in EtOH, made into granules, dried, and tabletted (diam. 5 mm). These tablets (700 g) were coated with 2000 mL EtOH contg. hydroxypropyl cellulose 100 and Mg stearate 20 g. These tablets were further coated with a soln. consisting of hydroxypropyl Me cellulose phthalate 300, a monoglyceride 30, talc 30, TiO2 15 g, EtOH 4000 mL, and H2O 1000 mL. These enteric tablets were coated with 1500 mL EtOH contg. hydroxypropyl cellulose 50 and Mg stearate 10 g, followed by 1500 mL EtOH contg. polyvinylacetal diethylaminoacetate 100 g to give the final product (93.2 mg/tablet). The pharmacokinetics of this prepn. was studied in dogs. These tablets are stable in the stomach and effective in reducing gastric acid, but have no pharmacol. effects if the acid content in the stomach is low.

L26 ANSWER 62 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1990:104871 HCAPLUS
DN 112:104871
TI Enteric antihypertensives containing CV 159
IN Imai, Takahiro; Taguma, Kazunori; Fukamachi, Takashi
PA Tokyo Tanabe Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 01131116	A2	19890524	JP 87-179070	19870720

GI



I

AB An antihypertensive CV 159 (I) with a polymeric base, optionally a surfactant, is coated with hydroxypropyl Me cellulose phthalate or its deriv. to give a formulation with enhanced bioavailability. Thus, I 10, Et acrylate-methacrylic acid copolymer 10, and poly(oxyethylene) hydrogenated castor oil 5 g were dissolved in 50 mL EtOH, and then lauryl sulfate 5 and lactose 30 g were dispersed, dried, and pulverized. The powder (12 g) was mixed with Mg metasilicate aluminate 15.7, CM-cellulose **Na** 4 and Mg stearate 0.3 g, and made into tablets. The tablets were then spray-coated with a mixt. consisting of hydroxypropyl Me cellulose phthalate 10, talc 3, polyethylene glycol 1 g and EtOH-CH2Cl2 (1:1) 280 mL. The enhancement of bioavailability of I was demonstrated in dogs.

L26 ANSWER 63 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1990:42612 HCAPLUS
DN 112:42612
TI Controlled-release pharmaceuticals for oral administration
IN Wato, Takahiko; Hama, Teruo; Inoue, Nobuko; Tada, Yukihiro; Hisaichi, Shinichi
PA Teikoku Seiyaku Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 01110622	A2	19890427	JP 87-267221	19871021
	JP 2573969	B2	19970122		

AB A buccal formulation which releases pharmaceutical intermittently is prepd. by laminating a drug-contg. layer with a release-controlling layer which also contains .gtoreq.1 drug layer. Thus, CM-cellulose **Na** 88, talc 2, Et cellulose 5, and salbutamol sulfate 5 g were mixed and made into a sheet (drug layer). Two pieces of the sheet were enclosed by a release-controlling agent (a mixt. of hydroxypropyl Me **cellulose acetate succinate** 85, Me cellulose 10, and polyvinylpyrrolidone 5g), laminated with another drug layer on one side and an adhesive layer on the other to give a buccal tape.

L26 ANSWER 64 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1989:502743 HCAPLUS
DN 111:102743
TI Sustained-release pharmaceutical matrixes containing polymer blends

having reverse phase morphology and giving a zero-order rate
IN Kashdan, David S.
PA Eastman Kodak Co., USA
SO U.S., 21 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4795641	A	19890103	US 87-87566	19870820
	CA 1319468	A1	19930629	CA 88-571672	19880711
	EP 303853	A2	19890222	EP 88-111876	19880723
	EP 303853	A3	19901122		
	EP 303853	B1	19930922		
	R: CH, DE, FR, GB, LI				
	JP 01090231	A2	19890406	JP 88-204825	19880819
PRAI	US 87-87566		19870820		

AB Disclosed are polymer blends contg. up to 40% by wt. an insol. cellulose acetate polymer (20-44% acetyl content) and >60% by wt. a sol. cellulose acetate phthalate, cellulose acetate trimellitate, and **cellulose acetate succinate** polymer. The blends have reverse phase morphol., i.e., wherein the sol. polymer phase comprises regions in the insol. continuous polymer phase. The blends are useful for zero-order controlled delivery of bioactive agents such as pharmaceutical and agricultural chems. Films made of a mixt. of 25% cellulose acetate (39.4% acetyl) and 75% **cellulose acetate succinate**, were loaded with 5, 10 or 20% dextromethorphan. At 5 and 10% loading, zero-order release was shown in simulated intestinal fluid, for 2.5 h, subsequent to an initial 5-min burst. At 20% loading, a greater burst effect was shown. Reverse-phase morphol. of the polymer matrix led to the retention of the structural integrity of the matrix after extn. of the sol. polymer.

L26 ANSWER 65 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1989:163588 HCAPLUS
DN 110:163588
TI Electrophotographic photoreceptors with interlayer containing binder resins and **alkali metal** salts
IN Koyama, Takashi; Mabuchi, Minoru
PA Canon K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63236051	A2	19880930	JP 87-68951	19870325
	JP 08023709	B4	19960306		

AB Electrophotog. photoreceptors are prepd. by forming, on a conductive support, a heat-sensitive layer through an interlayer contg. a binder resin and an **alkali metal** salt. The interlayer exhibits low elec. resistance and can correct effectively the defects on the surface of the support. Thus, an Al cylinder was 1st coated with a compn. contg. Coronate 2507 (blocked hexamethylene diisocyanate), Nippollan 800 (polyester polyol), and LiClO4 (I), heat-treated to harden the layer, then coated with a compn. contg. a

disazo pigment and CAB-381 (**cellulose acetate lactate**), and finally coated with a compn. contg. a hydrazone and MS-200 (Me methacrylate-styrene copolymer) to give a photoreceptor. The photoreceptor showed good potential characteristics and environmental stability and gave high-quality images, as compared to a control contg. no I.

L26 ANSWER 66 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1989:160377 HCAPLUS
DN 110:160377
TI Process for the preparation of oil-containing granules for use as pharmaceutical carriers
IN Hurka, Wilhelm; Hopfgartner, Johann; Fischer-Colbrie, Herwig
PA Arcana Chem.-Pharm. Fabrik G.m.b.H., Austria
SO Austrian, 8 pp.
CODEN: AUXXAK
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	AT 385654	B	19880510	AT 84-2829	19840904
	AT 8402829	A	19871015		

AB Dry, oil-contg. granules suitable for the prepn. of oral formulations are prepd. A mixt. contg. 50-90% by wt. carrier material in granulate form (particle size of 0.05-5 mm) and 2-15% by wt. highly disperse pyrogenic silicic acid (I) (particle size of the aggregate 0.1-2.0 .mu.m) is sprayed with 5-35% by wt. oils or oily materials contg. the pharmaceutically active agent either dissolved or dispersed. A mixt. contg. 700.00 g potato starch and 300.00 g lactose was moistened and granulated with a mixt. contg. 2 parts glycerol and 98 parts 4% gelatin soln. This granulate (794.45 g) was mixed with 45.00 g I in a screw mixer and this was sprayed with a suspension of 35.00 g indomethacin and 0.55 g tert-butyl-4-methoxyphenol in 125.00 g sesame oil; the temp. of this suspension was 45.degree..

L26 ANSWER 67 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1989:82515 HCAPLUS
DN 110:82515
TI Sustained-release implant for administering growth hormones
IN Shalati, Mohamad D.; Viswanathan, Ravi
PA International Minerals and Chemical Corp., USA
SO U.S., 4 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4761289	A	19880802	US 86-917771	19861010
	EP 326727	A1	19890809	EP 88-300876	19880202
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
PRAI	US 86-917771		19861010		

AB The title implants are prepd. by dispersing a water-diffusible solid in a soln. of a nonaq. solvent and a substantial water-insol. polymer, removing the nonaq. solvent to substantially dry the mixt., comminuting the dry mixt. to form particles, and pressing the particles together to form a pellet. Bovine growth hormone (800 mg)

was suspended in .apprx.1.7 g CH2Cl2 soln. contg. 141 mg of poly(lactic acid) (mol. wt. 15,600), the solvent evapd. under vacuum at room temp., 106 mg samples of material pressed into tablets, and the tablets coated with poly(lactic acid) and polycaprolactone.

L26 ANSWER 68 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1988:82133 HCAPLUS
DN 108:82133
TI Pharmaceutical film for treatment of periodontal disease containing a germicide and a water-soluble polymeric carrier
IN Higashi, Kiyotsugu; Kametaka, Shigeru; Morisaki, Katsuhiko; Hayashi, Shinichi; Izumi, Reiko
PA Rohto Pharmaceutical Co., Ltd., Japan
SO Eur. Pat. Appl., 8 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 241178	A1	19871014	EP 87-302514	19870324
	EP 241178	B1	19920108		
	R: DE, FR, GB, IT				
	JP 62223112	A2	19871001	JP 86-67810	19860325
	JP 05084282	B4	19931201		
	CA 1300515	A1	19920512	CA 87-532841	19870324
	AU 8770616	A1	19871001	AU 87-70616	19870325
	AU 618932	B2	19920116		
	AU 590403	B2	19891102	AU 87-70617	19870325
	AU 8770617	A1	19871001		
	US 4933182	A	19900612	US 89-414602	19890929
PRAI	JP 86-67810	19860325			
	US 87-29658	19870324			

AB The title pharmaceutical contains one or more active ingredients and a carrier comprising polymeric particles with limited soly. in water dispersed in a water-sol. polymer. A mixt. of methacrylic acid-Me methacrylate copolymer 80, triacetin 20, tetracycline.HCl 6, and EtOH 1000 parts was cast into a film which was pulverized into particles of 105-177 .mu.; the particles were suspended in a mixt. contg. tetracaine.HCl 0.03, and hydroxypropyl cellulose 1 part in a 100:0.5 ratio which was cast into a film of 300 .mu. thickness. The dissoln. profiles were different for each active agent, whereas the profiles were identical for a film prepd. from hydroxypropyl cellulose alone.

L26 ANSWER 69 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1987:582330 HCAPLUS
DN 107:182330
TI Indoor dispersion plaster
IN Stepita, Matej; Cesky, Vladimir; Mlejnek, Jiri
PA Czech.
SO Czech., 3 pp.
CODEN: CZXXA9
DT Patent
LA Czech
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CS 237947	B1	19851113	CS 84-1831	19840314

AB A dispersion plaster with defined rheol. and retention properties was prepd. contg. an org. polymer binder, silicate, polyphosphate dispersing agent, and a water-sol. cellulose deriv. Thus, mix water 20, CM-cellulose 1, **Na** hexametaphosphate 0.1, 2-ethylhexyl acrylate-vinyl acetate copolymer 1.4, Na2SO3 0.5, a 1:1 mixt. of kaolin and silica 6.5, quartz sand 70.5, and fungicide 0.1 part gave a thixotropic mixt. which is applied by painting, troweling, or guniting. The plaster had adhesion to concrete >0.25 MPa, wet abrasion >100 s, and workability >60 min on concrete and >40 min on porous concrete.

L26 ANSWER 70 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1987:186528 HCAPLUS
DN 106:186528
TI Developers for photosensitive resin type presensitized plates
IN Goto, Masao; Kanemori, Masao; Akao, Tsutae
PA Asahi Chemical Industry Co., Ltd., Japan; Sanyo Chemical Industries, Ltd.
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61175636	A2	19860807	JP 85-17475	19850130

AB The claimed developers for photosensitive resin type presensitized plates contain a surfactant whose hydrophilic-lipophilic balance (HLB) is .gtoreq.10 and a water-sol. amine or its oxyalkylene ether. Thus, a presensitized plate prepd. by using a compn. contg. adipic acid-ethylene glycol-fumaric acid-propylene glycol copolymer, acrylic acid, acrylamide, benzoin and hydroquinone was imagewise exposed and developed with a soln. contg. diethanolamine and polyethylene glycol (d.p. .apprx.50) octylphenyl ether.

L26 ANSWER 71 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1987:182704 HCAPLUS
DN 106:182704
TI Sustained-release pharmaceuticals
IN Myamoto, Yosuke; Yamaguchi, Yukya; Sato, Hiroshi; Iijima, Masao
PA Zeria Pharmaceutical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62048618	A2	19870303	JP 85-187571	19850827

AB A sustained-release pharmaceutical is prepd. which releases the active agent continuously at a const. rate for a prolonged period, or releases it at an accelerated rate after a given period. Diclofenac **Na** 400, a hydrogenated plant oil 800, and cryst. cellulose 100 g were mixed, and 700 mL 80% by vol. EtOH contg. 15% by wt. Et cellulose was added. The mixt. was made into 0.8 mm granules. The slow-release pharmaceutical granules (350 g) were coated with 880 mL 70% by vol. iso-Pr alc. contg. 8% by wt. hydroxypropyl Me cellulose. The coated granules were mixed with 2 g of Mg stearate and made into tablets (240 mg/tablet).

L26 ANSWER 72 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1984:157897 HCAPLUS
DN 100:157897
TI Ion adsorbent for metals having a coordination number greater than two
IN Porath, Jerker O.
PA Gelinnovation H. B., Swed.
SO U.S., 7 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4423158	A	19831227	US 83-461512	19830127

AB Metal ion chelating absorbents are formed by a hydrophilic polymer having at least 0.5 substituents per monomer unit comprising OH, O, CO, NH2, NH or N so that the concn. of these groups is at least 25 mol %. Thus, 0.5 kg crosslinked dextran [9004-54-0] was treated with 2.5 L 0.8 M NaOH and 120 mL epichlorohydrin (I) [79-08-3]. After 1 h, 500 mL 4 M NaOH and 240 mL I were added. After sitting overnight, the gel was washed with 10% HOAc and 0.2 M NaHCO3. To the gel was added 300 mL ethylenediamine [106-89-8] and 600 mL 0.2 M NaHCO3, and the mixt. was heated 8 h at 50.degree.. The gel was then treated with 375 g BrCH2CO2H, 120 g NaOH, and 800 g water. The gel was stirred overnight and acid washed. The gel adsorbed 38 .mu.mol Cu2+ ion/mL gel, which could not be eluted with glycine, but could be with EDTA **Na** salt at pH 7.

L26 ANSWER 73 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1983:622444 HCAPLUS
DN 99:222444
TI Composition for treating photopolymeric printing plate
IN Vasil'ev, V. B.; Velichko, E. M.; Krikunenko, M. A.; Lazarenko, E. T.; Moiseenko, S. V.
PA Ukrainian Printing Institute, USSR
SO U.S.S.R.
From: Otkrytiya, Izobret., Prom. Obraztsy, Tovarnye Znaki 1983, (36), 188.
CODEN: URXXAF
DT Patent
LA Russian
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 1045214	A1	19830930	SU 82-3473975	19820721

AB The addn. of hydroquinone 5-10 and KI 4-10 wt.% to a compn. contg. glycerol 40-50 and H2O 30-50 wt.% increases the flexibility of the photopolymeric layer of the printing plate, based on **cellulose acetate succinate**, and increases the adhesion of the printing elements to the substrate.

L26 ANSWER 74 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1983:618588 HCAPLUS
DN 99:218588
TI Intestinal-soluble capsules
PA Shin-Etsu Chemical Industry Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 58138458	A2	19830817	JP 82-20266	19820210
JP 03047246	B4	19910718		

AB Hydroxypropyl Me **cellulose acetate succinate** (HPMC-AS) **alkali metal** salts in H2O are mixed with gelatin and the mixt. is made into enteric capsules which were treated with acid solns. Thus, 200 g HPMC-AS (degree of substitution = 0.24 hydroxypropyl group, 1.87 methoxy group, 0.44 acetyl group and 0.24 succinyl group/unit glucose) was dispersed in 920 g H2O, and 10% NaOH (78 g) was gradually added to the suspension to give a soln., which was mixed with 25 g gelatin. The mixt. was heated at 50.degree. for 3 h while stirring and molded into capsules, which were air dried for 1 h, treated with 10% HCl at 15.degree. for 5 min, H2O for 20 min and then 10% citric acid [77-92-9] for 5 min to form enteric capsules.

L26 ANSWER 75 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1983:424246 HCAPLUS
DN 99:24246
TI Anisotropic membranes from mixed cellulose esters
AU Alimardanov, R. S.; Sarkisyan, A. A.; Guseinov, R. M.
CS USSR
SO Sb. Tr. - Inst. Neftekhim. Protsessov im. Yu. G. Mamedalieva, Akad. Nauk Az. SSR (1982), 13, 180-90
CODEN: SNPAAQ; ISSN: 0400-9525
DT Journal
LA Russian
AB Reverse osmosis membranes resistant to org. compds. (Me2CO, arom. hydrocarbons such as PhOH) and to microorganisms and suitable for wastewater purifn. are obtained from mixed cellulose esters prepd. by esterifying cellulose acetate having various degrees of substitution with org. acids. **Cellulose acetate acrylate** [59979-19-0] and cellulose acetate methacrylate [9032-34-2] underwent crosslinking leading to formation of dense films insol. but swellable in Me2CO. Mixed esters of cellulose with acetic acid and Cl-contg. carboxylic acids exhibited good thermal stability and resistance to microorganisms and were suitable for the purifn. of PhOH-contg. wastewater.

L26 ANSWER 76 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1981:193621 HCAPLUS
DN 94:193621
TI Porous, difficultly flammable synthetic acrylic fibers
IN Kondo, Yoshikazu; Yamamoto, Toshihiro; Yamamoto, Takaji
PA Kanebo, Ltd., Japan; Kanebo Synthetic Fibers Ltd.
SO Ger. Offen., 51 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 3021889	A1	19810212	DE 80-3021889	19800611
DE 3021889	C2	19821028		

	JP 56000309	A2	19810106	JP 79-77048	19790618
	JP 58043483	B4	19830927		
	JP 56004711	A2	19810119	JP 79-77049	19790618
	JP 61049406	B4	19861029		
	US 4395377	A	19830726	US 82-397282	19820712
	US 4460648	A	19840717	US 82-397280	19820712
	GB 2108040	A1	19830511	GB 82-28954	19821011

PRAI JP 79-77048 19790618
JP 79-77049 19790618
JP 79-77046 19790618
JP 79-127065 19791001
JP 79-127066 19791001
US 80-156993 19800606
GB 80-19925 19800618

AB Porous flame-retardant acrylic fibers with good water absorption and fiber properties are manufd. from 2-50% cellulose acetate (I) and 50-98% acrylic copolymer contg. 10-60% vinyl chloride and(or) vinylidene chloride. The fibers have pore area, A, <15 m2/g and porosity, V, 0.05-0.75 cm3/g, with V/A being .gtoreq.1/30. Thus, a DMF soln. contg. 25% polymer mixt. consisting of 90-parts 55:2:43 acrylonitrile-**sodium** methallylsulfonate-vinylidene chloride copolymer [34077-04-8] and 10 parts I was extruded into a 60:40 DMF-water coagulation bath. The fibers were stretched 5-fold, dried at 120.degree. to a water content of 0.5%, stretched 1.5-fold at 100.degree., and crimped to give 3-denier fibers having water absorption 24%, tenacity 3.0 g/denier, and good dyeability.

L26 ANSWER 77 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1979:524809 HCAPLUS
DN 91:124809
TI Water-absorbing acrylic fibers
IN Tanaka, Hiroyoshi; Jujii, Shigeru; Suzuki, Mitsuo
PA Toray Industries, Inc., Japan
SO Ger. Offen., 25 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2901778	A1	19790726	DE 79-2901778	19790118
	JP 54101920	A2	19790810	JP 78-4473	19780119
	JP 58018444	B4	19830413		

PRAI JP 78-4473 19780119

AB Acrylic fibers having excellent water absorption and mech. properties and consisting of a porous core covered with a denser skin are manufd. from compns. contg. 90/99.9% acrylic polymer and 0.01-10% synthetic polymer miscible with the acrylic polymer. Thus, a spinning dope contg. 20% 95.85:4.0:0.15 M acrylonitrile-Me acrylate-**sodium** methallylsulfonate copolymer [26658-88-8] and 3% cellulose acetate (I) [9004-35-7] (based on acrylic polymer wt.) was extruded through a nozzle with 0.065 mm-diam. orifices into a 50% aq. DMSO soln. at 55.degree.. The fibers were stretched 6 times their original length, washed with water, and dried 15 min at 130.degree.. The fibers obtained had water absorption 49%, tenacity 2.3 g/denier, and elongation 18.4%, vs. 7%, 2.9 g/denier, and 22.1% for fibers prepd. without I.

L26 ANSWER 78 OF 85 HCAPLUS COPYRIGHT 1998 ACS

AN 1976:479909 HCAPLUS
DN 85:79909
TI Preparation of unsaturated cellulose esters in the melt of N-ethylpyridiniumchloride
AU Pohjola, Leila; Riala, Riitta; Tammela, V.
CS Lab. Ind. Chem., Helsinki Univ. Technol., Espoo, Finland
SO Pap. Puu (1976), 58(4A), 198-200
CODEN: PAPUAU
DT Journal
LA English
AB Cellulose is acylated in molten N-ethylpyridinium chloride (I) [2294-38-4] with 0-10 moles Ac2O and 5-7.5 moles CH2:CRCOX [when R = H, X = OH; when R = Me, X = Cl and(or) OH] per glucose unit, giving esters with total substitution degree (s.d.) 0.3-2.5 and vinyl s.d. 0.1-0.9. Ac2O promotes vinyl group substitution and microcryst. cellulose reacts more readily than the .alpha. form at 353-63.degree.**K** in 150 g I contg. 70 ml DMF and 5 ml pyridine. The resulting **cellulose acetate acrylate** [59979-19-0], cellulose acetate methacrylate [9032-34-2], and cellulose methacrylate [59979-21-4] are sol. in Me2SO.

L26 ANSWER 79 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1975:429638 HCAPLUS
DN 83:29638
TI Acoustic study of the structure of acetate fibers. Logarithmic extinguishing decrement
AU Khidoyatova, R. A.; Fainberg, E. Z.; Papkov, S. P.; Brener, I. R.
CS Vses. Nauchno-Issled. Inst. Iskusstv. Volokna, Mytishchi, USSR
SO Khim. Volokna (1975), (2), 38
CODEN: KVLKA4
DT Journal
LA Russian
AB The effect of various low- and high-mol. wt. additives on the heterogeneity of acetate fiber structures was examd. by the log. damping decrement (**K**) at min. and max. stresses. A higher **K** value indicated a higher dependence of **K** on the applied stress, which in turn confirmed the effect of additives on fiber structure. The lowest effect was obsd. for additives which led to crosslinking of polymer chains. A pos. effect was obsd. on addn. of cellulose acetate phthalate [9004-38-0] as a polymer additive compared to **cellulose acetate succinate** [9032-35-3], and other additives. None of the examd. additives led to significant changes in heterogeneity of acetate fiber structures, which was important in prepn. of fibers.

L26 ANSWER 80 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1974:554839 HCAPLUS
DN 81:154839
TI Influence of type of solvent and catalyst on formation of **cellulose acetate succinate** backing used for photopolymeric printing forms
AU Kryazhev, V. N.; Pogosov, Yu. L.
CS USSR
SO Issled. Razrab. Poligr. Prom. (1973) 84-9
From: Ref. Zh., Khim. 1973, Abstr. No. 18S332
DT Journal
LA Russian
AB The degree of esterification of cellulose acetate [9004-35-7], d.p.

220, with succinic anhydride [108-30-5] at 60-85.deg. increased with increasing the polarity of the solvent and in the presence of basic catalysts, e.g. **Na** acetate [127-09-3], **K** acetate [127-08-2], **Na** phosphate [7601-54-9], or monopotassium phthalate [877-24-7].

L26 ANSWER 81 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1974:523161 HCAPLUS
DN 81:123161
TI Synthesis and examination of **cellulose acetate succinate**
AU Ratovskaya, A. A.; Shkol'nik, S. I.; Teodorovich, D. A.
CS USSR
SO Issled. Razrab. Poligr. Prom. (1973) 52-7
From: Ref. Zh., Khim. 1973, Abstr. No. 18S333
DT Journal
LA Russian
AB The esterification of OH groups in cellulose acetate (I) [9004-35-7] (contg. combined AcOH 44%) with succinic anhydride [108-30-5] was examd. at 80-120.deg. in DMF, within 0.5-10 hr, in the presence of small amts. of **Na** acetate and without it. To obtain **cellulose acetate succinate** [9032-35-3] with the content of succinoyl groups 20-5%, the following conditions were established for esterification: temp. 100.deg., the I/succinic anhydride mol. ratio 1:1.5, the amt. of catalyst 0.01-0.05 g/mole of I, the amt. of DMF 4 wt. parts per 1 part of I, the reaction time 4 hr.

L26 ANSWER 82 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1969:442344 HCAPLUS
DN 71:42344
TI Sustained release or enteric small cuboidal dosage forms
IN Gaunt, William E.
SO U.S., 7 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3449489	A	19690610	US 65-500297	19651021

AB Small cuboidal dosage forms of a variety of medicaments are provided which can be either sustained release or enteric in nature. The biol. active agent is dissolved in a volatile solvent or solvent mixt. with a film former or a film forming polymer and the soln. is cast onto a flat surface, the solvents evapd. and the remaining flexible film cut into strips and then transversely to form the cuboidal particles which are clear, transparent and glass-like. Thus, 10 g. of pentapiperide Me sulfate (I) and 10 g. of poly(vinyl acetate)-phthalate copolymer (II) were dissolved in 50 cc. of a mixt. of 80 parts of CH2Cl2 and 20 parts of MeOH, 20 g. of Al acetyl salicylate (III) was dissolved in 50 cc. of the same solvent mix. The two solns. were mixed and poured into a shallow tray of approx. 250 cm.2 area. The solvent was permitted to evaporate slowly and when the film weighed about 50 g., it was removed from the dish and cut into approx. 0.05 in. cubes. The remaining solvent was removed in the oven at 60.degree.. On testing the release characteristics of these cubes using the rotating bottle technic of Souder and Ellenbogen, the following data were obtained. After gastric

exposure for 1 hr., the % cumulative release was 18.5. After gastric exposure for 1 hr. and intestinal exposure for 1 hr., the % cumulative release was 25.0. After 1 hr. gastric plus 3 hrs. intestinal exposure, the % cumulative release was 35.0%. After 1 hr. gastric plus 7 hrs. intestinal exposure the % cumulative release was 45.5%. Different film formers gave different release characteristics. Using 9 parts I and 24 parts III with 12 parts of cellulose acetate phthalate (IV) or with 6 parts IV and 6 parts II, the following results were obtained. In the former case, the % cumulative release was 25.0, 57.5, 87.5 and 97.5% under the conditions described above. In the latter case, the figures were 17.5, 42.5, 67.5 and 90.0% resp. The following medicaments were also used; vitamin B12, phendimetrazine-HCl, valethamate bromide, isothipendyl hydrochloride, chlorpheniramine maleate, methamphetamine-HCl, castor oil, chlordiazepoxide, **Na** O,O-dimethyl 2,2,2-trichlorohydroxyethylphosphonate and hexylresorcinol. The following film formers were also used; white wax-free shellac, refined gum sandarac, **cellulose acetate succinate**, poly(vinylpyrrolidinone), cellulose acetate propionate and cellulose acetate diethylaminoacetate. The following plasticizers were used; di-Et phthalate and tri-Bu acetylcitrate. The following salts were used; dibasic Al acetate, Al abietate, Al acetylsalicylate, Al laurate and Al octoate. The following solvents and solvent mixts. were used; H2O, CHCl3, iso-PrOH and EtOH. The rate of soln. of the film formers is more important in the release of the drugs than the soly. of the drugs themselves.

L26 ANSWER 83 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1968:403461 HCAPLUS
DN 69:3461
TI Biocidal organotin derivatives of polymers
IN Gertner, David; Migdal, Shmuel; Zilkha, Albert
PA Yissum Research Development Co. of the University of Jerusalem
SO Brit., 12 pp.
CODEN: BRXXAA
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 1107929		19680327		
PRAI	IL		19651114		

AB Polymers such as poly(vinyl alc.), starch, cellulose derivs., crosslinked poly(methacrylic acid), styrene-maleic anhydride copolymers, and sulfonated polystyrene are treated with Bu3SnCl, Ph3SnCl, (Bu3Sn)2O, or Ph3SnOH to prep. the title derivs. (ethers or esters) which are useful as microbicides, insecticides, and fungicides, e.g., in thread or yarn. Thus, 3 g. poly(vinyl alc.) in 50 ml. Me2SO was mixed with 30 ml. 1.07N **K**-naphthalene soln. (in tetrahydrofuran). Bu3SnCl (10.4 g.) was added, and the mixt. was stirred for 2 hrs. and allowed to stand overnight. Dry ether (700 ml.) was added, and 8.25 g. of the pptd. tributyltin ether deriv. of poly(vinyl alc.) was sepd. under Ar. The crude deriv. contained 1.94 g. KCl, and the product contained 33.4% Sn. The deriv. was effective, at 30 .gamma./ml., for inhibiting the growth of Cryptococcus neoformans and Candida albicans fungi.

L26 ANSWER 84 OF 85 HCAPLUS COPYRIGHT 1998 ACS

AN 1968:40499 HCAPLUS
DN 68:40499
TI Hardeners for polymers containing carboxyl groups
IN Vrancken, Marcel N.; Willems, Jozef F.; Van Paesschen, August J.; Lemmerling, Jose T.
PA Gevaert Photo-Producten N. V.
SO Ger., 5 pp.
CODEN: GWXXAW
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 1256408		19671214	DE	19620512

AB The title polymers were made insol. in H2O by treatment with N,N'-bis(haloacetyl)ethylenediamines, ethylene bis(haloacetates), or bis(halomethyl)benzenes. Thus, to 100 ml. of a 5% neutralized aq. soln. of the half ester of maleic acid and poly(vinyl alc.) contg. 16% vinyl maleate groups and prepd. as described in Belg. 552,537, 5 ml. of a 5% soln. of N,N'-bis(bromoacetyl)ethylenediamine (I) in HCONMe2 was added. The soln. was adjusted to pH 7, poured onto glass plates, and dried at room temp. After several days drying, the coating could be treated with boiling water. A similar coating without I dissolved in cold water. Other polymers treated in a similar manner were **Na** alginate, the half ester of o-phthalic acid and poly(vinyl alc.), a styrene-acrylic acid copolymer, a styrene-methacrylic acid copolymer, cellulose **acetate** maleate, Et **cellulose succinate**, amylopectin o-phthalate, Et cellulose acetate, and Et cellulose o-phthalate. Other hardeners used were N,N'-bis(chloroacetyl)ethylenediamine, 1,2-bis(monobromoacetoxy)ethane, and p-bis(bromomethyl)benzene.

L26 ANSWER 85 OF 85 HCAPLUS COPYRIGHT 1998 ACS
AN 1967:444988 HCAPLUS
DN 67:44988
TI Preparation of cellulose acrylic-acetic mixed acid esters
AU Matsuzaki, Kei; Kanai, Taiichi; Miyata, Toru
CS Univ. Tokyo, Tokyo, Japan
SO Sen'i Gakkaishi (1966), 22(4), 173-8
CODEN: SENGA5
DT Journal
LA Japanese
AB The following methods for prepg. cellulose acrylate-acetates were investigated: (1) Cellulose pretreated with 40% aq. KOAc or **K** acrylate (I) was treated with a mixt. of HOAc, Ac2O, acrylic acid (II), and a diluent at 120.degree.; 3-14% of acrylate groups (on wt. of sample) was introduced together with the acetate groups. (2) Cellulose was treated with a mixt. of HOAc, Ac2O, II, a diluent, and a small amt. of H2SO4 as a catalyst; no acrylate groups were found in the reaction product. (3) Cellulose di- or triacetate was hydrolyzed in 90-5% aq. II with 0.1-0.5% HCl as a catalyst; a small amt. of acrylate groups was introduced. (4) Cellulose impregnated with 40% aq. KOAc was treated with acrylic anhydride (III) in a diluent; a large amt. of acrylate groups (.apprx.30%) was introduced. (5) Cellulose was treated with a mixt. of HOAc, Ac2O, II, and III with H2SO4 as a catalyst; mixed cellulose esters, contg. 10-20 wt.% acrylate groups, 30-5 wt.% acetate groups, and sol. in org. solvents, were obtained. Ir absorption bands of cellulose

acrylate were compared with those of cellulose acetate, and the absorption at 807 cm.-1 in the former was used to det. qual. the presence of cellulose acrylate.

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(FILE 'REGISTRY' ENTERED AT 14:19:09 ON 22 DEC 1998)
DEL HIS Y

FILE 'HCAPLUS' ENTERED AT 14:39:34 ON 22 DEC 1998
L1 21644 S (CELLULOSE OR HEMICELLULOSE)(2A)ACETATE
L2 52 S L1(20A)MIXED(2A)ESTER
L3 495 S L1(9A)(FORMIC OR ACRYLIC OR MALONIC OR SUCCINIC)
L4 489 S L1(9A)(FORMATE OR ACRYLATE OR MALONATE OR SUCCINATE)
L5 43 S L1(9A)(GLUTARIC OR FUMARIC OR GLYCOLIC OR LACTIC)
L6 86 S L1(9A)(GLUTARATE OR FUMARATE OR GLYCOLATE OR LACTATE)
L7 45 S L1(9A)(MALIC OR TARTARIC OR CITRIC)
L8 79 S L1(9A)(MALATE OR TARTARATE OR CITRATE)
L9 18 S L1(W)(FORMIC OR ACRYLIC OR MALONIC OR SUCCINIC)
L10 251 S L1(W)(FORMATE OR ACRYLATE OR MALONATE OR SUCCINATE)
L11 1 S L1(W)(GLUTARIC OR FUMARIC OR GLYCOLIC OR LACTIC)
L12 15 S L1(W)(GLUTARATE OR FUMARATE OR GLYCOLATE OR LACTATE)
L13 1 S L1(W)(MALIC OR TARTARIC OR CITRIC)
L14 2 S L1(W)(MALATE OR TARTARATE OR CITRATE)
L15 3 S L1(W)(HALOACETIC OR CHLOROACETIC OR BROMOACETIC OR IODO
L16 0 S L1(W)(HALOPROPIONIC OR CHLOROPROPIONIC OR BROMOPROPIONI
L17 288 SS L9-L16
L18 6 S L17 AND (ALKALI(4A)METAL)
L19 31 S L17 AND (LI OR NA OR K OR RB OR CS)
L20 55 S L17 AND (LITHIUM OR SODIUM OR POTASSIUM OR RUBIDIUM OR
L21 51 S L17 AND (MG OR CA OR SR OR BA)
L22 26 S L17 AND (MAGNESIUM OR CALCIUM OR STRONTIUM OR BARIUM)
L23 114 S L18-L22
L24 0 S L23 AND (PKA OR DISSOC?)

FILE 'HOME' ENTERED AT 14:51:00 ON 22 DEC 1998

FILE 'HCAPLUS' ENTERED AT 14:55:04 ON 22 DEC 1998
L25 1 S L17 AND (SR OR BA)
L26 85 S L18 OR L19 OR L20 OR L22 OR L25
L27 0 S L26 AND EQUIVALENT
L28 0 S L26 AND PKA
L29 1 S L17 AND PKA
L30 0 S L17 AND ION(3A)EQUILAV?
L31 1 S L17 AND ION(3A)EQUIVAL?
L32 0 S L17 AND (1 OR 2)(4A)MOLE
L33 0 S L17 AND SLURRY(9A)PH
L34 55 S L17 AND PH
L35 24 S L17 AND PH(5A)(4 OR 5)
L36 22 S L17 AND PH(2A)(4 OR 5)
L37 20 S L17 AND PH(2A)6
L38 32 S L36 OR L37
L39 11 S L38 AND (SLURR? OR MIXTUR?)
L40 0 S L17 AND ACETYLAT?(9A)(DEGREE OR AMOUNT OR PERCENT?)
L41 1 S L17 AND SULFURIC?
L42 0 S L17 AND LINTER AND WOOD
L43 0 S L17 AND HARDWOOD AND SOFTWOOD
L44 135 S L17 AND (ACID OR SULFURIC)
L45 114 S L17 AND L23
L46 71 S L23 AND (ACID OR SULFURIC)
L47 2 S L46 AND 5.5
L48 0 S L46 AND (DISSOC? OR PKA)

L49	1	S	L23	AND	DOPE	
L50	1	S	L17	AND	DOPE	
L51	0	S	L50	NOT	L49	

=> d cost

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
CONNECT CHARGES	61.18	113.07
SEARCH CHARGES	0.00	47.60
DISPLAY CHARGES	237.52	268.67
	298.70	429.34
CAPLUS FEE (5%)	14.94	17.61
FULL ESTIMATED COST	313.64	446.95

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-64.31	-69.47

IN FILE 'HCAPLUS' AT 15:18:06 ON 22 DEC 1998